Conceptualising Participatory Action Research – Three Different Practices

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Abstract: The aim of this paper is to elaborate on the concept of action research. With inspiration from work performed by Checkland and McKay & Marshall the conceptualisation we are suggesting is illustrated in a model consisting of three different practices. Action research means that a research practice and a business practice are interacting. This interaction constitutes a third practice, which is at the same time a business change practice and an intervening empirical research practice. In the paper, we show how the three practices are interlinked to each other. The analysis is based on a work practice theory (ToP).

Keywords: Action Research, Information Systems Research, Practice Theory

1. Introduction

The problem we are approaching in this paper is how to conceptualise action research. Jönsson (1991) claims, “there probably are as many definitions of action research as there are authors on the subject”. Some definitions can be found in Checkland (1991), Jönsson (1991), Avison et al. (2001), Heron & Reason (2001) and McKay & Marshall (2001). Several of these conceptualisations differ from each other often due to different views and basis (see section 2). On the other hand, Lau (1997) claims in an inquiry of 30 information systems articles about action research that the concept action research is not explained at all. Further, Lau (1997) claims that “… neither the epistemological status of action research nor its methodological details are well established in the IS at present”.

What most researchers agree about is that researchers are interested in both action and research. In contrast, consultants are primarily interested in action, that means changing some business. Our view of action research is that action researchers are researchers that intervene in a business change process. It is the research part that is the researchers primary interest since their research aim is to develop new knowledge. The research part takes place when researchers reflect on the business change process. The business change process works mainly as a source for collecting data. The business change process is therefore important as a source of knowledge, but is in itself of secondary interest.

Participatory action research projects are collaborative in its character. This means that there is collaboration between researcher and business practitioners in order to reach some goals. Some of the conceptualisations/definitions mentioned above seem to miss that different participants in a participatory action research project have different roles, assignments and financiers (see section 4). The participants in an action research project have both common and different interests. In order to analyse the different interests of the participants we will use the theory-of-practice model proposed by Goldkuhl & Röstlinger (2002).

A common criticism against participatory action research is that it lacks from scientific rigor (Kemmis & McTaggart, 2001). This means that some of the existing definitions are not clear enough and that there is a risk of a fuzzy understanding of the concept of action research. A fuzzy understanding of action research could lead to confusion, communication problems or authority problems among the researchers and the business actors. In this paper, we propose a more rigorous definition of the concept of action research.

Avison et al (2001) raise the question of authority and asks “Who is really in charge of the research project?”. This is an interesting question that we will try to answer trough an elaboration on the concept of action research. The aim of this paper is to further develop the concept of action research and propose a
conceptualisation of participatory action research.

2. Views of action research

Action research can be carried out in several ways. One movement within action research is to view all participants in a project as equal and with the same conditions and rights to participate in decisions about research method and what to be researched (Heron & Reason, 2001; Oates, 2002). One specific form of action research in this direction is called Co-operative inquiry (CI). Heron & Reason (2001) claim “all those involved contribute to the decisions about what is to be looked at, the inquiry methods to be used, the interpretation of what is discovered and the action which is the subject of the research”.

Heron & Reason’s (2001) view of action research can be captured in the label of their paper “The Practice of Co-Operative Inquiry: Research ‘with’ rather than ‘on’ people”. The basis for this view is that people should not be treated as passive subjects, people should be treated as active agents. This basis is also in line with what in information systems field often is called user-centred design (e.g. Preece et al., 1994).

Further, Heron & Reason claim that traditional researcher and subject roles should be replaced by a co-operative relationship so that all those involved work together as co-researcher and co-subjects. They also claim that subjects should be fully involved in research decisions about both content and method.

In other words, followers of this view of action research claim that there is one large project practice where all the participants (system analysts, designers, users, managers etc) jointly discusses all kind of relevant questions in order to reach agreements. In this paper, we will challenge this statement by pointing out some complications that follows this democratic view (see section 5).

Checkland’s (1991) basis is to suggest an alternative to positivistic research. Checkland uses a cycle to describe the action research process (see figure 1). The cycle consists of the components: research themes, real word problem situation, reflections based on the framework (F) and methods (M) used and findings.

Figure 1: The cycle of action research (Checkland, 1991)

This one-cycle view of action research is challenged by McKay & Marshall (2001). They claim that the action research process consists of two interlinked cycles because the action research has dual aims (see figure 2). One of the aims is to bring about improvements through making changes in the real world situation. The other aim is to generate new knowledge and insights according to the research question. With these dual aims in mind McKay & Marshall suggest a refined model consisting of two interlinked cycles. This conceptualisation with two cycles seems very fruitful since it makes it possible to talk about two different interests (research interest and the business change interest), two different methods (research method (Mr) and change method (Mps)) and two types of
results (research result, and change result).

What is unclear in McKay & Marshall’s conceptualisation is how the two cycles are interlinked. One interpretation of the illustration in figure 2 is that both cycles consist of two processes containing the same phases and that the links only occurs between the corresponding phases. In figure 2 the relations between the research method and the business change method are clearly marked but the meaning of the link is not clear.

![Figure 2: Action research viewed as a dual cycle process (McKay & Marshall, 2001)](image)

Jönsson’s (1991) definition of action research (borrowed from Argyris et al. (1985) reads “Action science is an inquiry into how human beings design and implement action in relation to one another. Hence it is a science of a practice …”. Further, Jönsson means that action research “is when scientists engage with participants in a collaborative process of critical inquiry into problems of social practice in a learning context.” and that “action research is a conscious effort of researchers to place themselves in contexts where they are likely to observe processes from which they can induce conjectures for further scientific treatment”.

Jönsson’s definitions or way of looking at action research is close to McKay & Marshall’s (2001) view of action research. The last citation above indicates that there is more than one practice. This view differs from the view of Heron & Reason (2001) and of Checkland (1991). We will go one step further and claim that there actually are three interlinked practices. This claim will be discussed in section 3 and 5.

3. A conceptualisation of three interlinked practices

As mentioned, McKay & Marshall (2001) discusses the action research process in terms of cycles (see section 2). Instead of talking about cycles we prefer talking about practices. Kemmis & McTaggart (2001) claim, “a science of practice must in itself be a practice”. This is however not made a theme in their paper. We will in this paper use a practice perspective on action research utilising a generic model of work practices (see section 4). In adopting a practice perspective it is possible to distinguish between different practices. As a starting point we talk about a research practice and a business practice (see figure 3).

![Two different practices](image)

*starting to collaborate*
and can be viewed as three practices!

![Figure 3: The research practice, the change practice and the business practice](image)

When action research is performed there is an interaction between these two practices and they are starting to collaborate. This collaboration makes it possible to talk about a third practice. The third practice is the intersection of the two practices. This means that we divide the research practice into two sub-practices: A non-empirical part and an empirical part. The non-empirical part we call the theoretical research practice. The empirical part we call the empirical research practice. It is of course a particular empirical research practice since the researchers take (more or less) active part in the business change. It is an intervening (not only observing) empirical research practice.

In the same way the business practice is divided into two practices, which we call regular business practice and business change practice. The empirical research practice and the business change practice are the same practice but is labelled in two ways depending on the perspective. This practice is an intersection of the research practice and the business practice. A separation of the three practices is made in order to be able to treat them as three units of analysis. This means that we can analyse the three practices and their relations separately (see section 5).

4. An analysis model: A generic conceptualisation of practices

The model (see figure 4) we have used for clarify that there exists three interlinked practices is a generic model of work practices (Goldkuhl & Röstlinger, 1999; 2002). A practice is considered to be “embodied materially mediated arrays of human activity centrally organized around shared practical understanding” (Schatzki et al, 2001). A practice is a meaningful entity of a holistic character and consists of human actions, humans and their shared practical understanding, and codifications of a such understanding in a common language and also of material objects (artefacts) used in the practice (Goldkuhl & Röstlinger, 2002).

The analysis model is briefly described in this paper. The conditions in the model consists of assignments, base, financial capital, norms, judgements, general & procedural knowledge and instruments. For each practice there exists one or several assigners and each practice is based on such assignments. The base for the practice could be raw material that will be refined in the practice into material products that are the results of the practice. The base could also be information that will be further processed into information products. Financial providers are those who compensate the producers for their work. The model also contains norms and judgements. There are quality norms and action norms that tell you what to do and what not to do. Laws and other regulations govern all the practices. In a practice there are also general (descriptive) & procedural knowledge as such. The practices also use different instruments to process material or information. An external instrument provider could construct the instruments. The producers perform the actions in the work practice. The role of the producers is to produce a result for a client.
5. Analysing the three interlinked practices

Following the ToP-model (Goldkuhl & Röstlinger, 2002) we will show that the three practices have different conditions, results and clients. We have analysed the practices according to assigners, assignments, financial providers, external knowledge & instrument providers, procedural knowledge and instruments, actions, results and clients (see table 1). The analysis also shows which interlinks that exist between the practices.

First, there are different assigners for the three practices. The main assigners to the regular business practice are its clients/customers. The client or some representative is ordering a product from the regular business practice. For the research practice, there are not as clear assigners. One can talk about the science community (academia) as a general assigner. More specifically it can be research executives, the researchers themselves and sometimes external assigners (from government or business practices). The assignment of the theoretical research practice is to develop new knowledge or theory. The assigners of the business change practice/empirical research practice are both the theoretical research practice and the regular business practice. The intersected practice is a sub-practice serving the other two practices. This means that there are assignments both from theoretical research practice and regular business practice. The assignment of the business change practice/empirical research practice is twofold. The empirical research work is governed by research interests and research questions, which function as

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1 The practice view (ToP) applied in this paper implies that all practices have serving functions in relation to their clients.
assignments from theoretical research practice. From the view of the regular business practice the assignment is a change request that should improve the regular business practice. The assigners of the regular business practice are clients and the assignment is a product order. The theoretical research practice is often financed by universities or by external financial providers (e.g. research councils). The regular business practice has clients as financial providers. In a non-commercial setting there may be other ways of financing the regular business practice (e.g. by taxes). The business change practice/empirical research practice may be financed in different ways depending on contingent factors (compensation from research practice, business practice, external providers). The regular business practice is usually financing its own change efforts. In the three practices there are also different procedural knowledge and instruments. The instruments used in the theoretical research practice are research approaches and methods. Instruments used in the regular business practice are different production equipments. The instruments used in the business change practice/empirical research practice are change methods and research methods. Confer what was said above about problem solving methods and research methods (McKay & Marshall, 2001).

**Table 1:** Characterization of theoretical research practice, business change practice/empirical research practice and regular business practice

<table>
<thead>
<tr>
<th>Theoretical research practice</th>
<th>Business change practice/empirical research practice</th>
<th>Regular business practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assigner</strong></td>
<td>Academia, sometimes external assigners</td>
<td>Researchers (theoretical research practice) and business practitioners (regular business practice)</td>
</tr>
<tr>
<td><strong>Assignment</strong></td>
<td>Develop new knowledge, Research application/Research agreement</td>
<td>Research interest, research questions (from theoretical research practice) Change request (from regular business practice)</td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td>Established and hypothesized research knowledge</td>
<td>Parts of the regular business (to be observed and reflected upon as a base for change proposals) Research knowledge as useful ideas for change</td>
</tr>
<tr>
<td><strong>Financial providers</strong></td>
<td>Universities, external funding</td>
<td>Regular business practice and research funding</td>
</tr>
<tr>
<td><strong>Procedural knowledge, instruments</strong></td>
<td>Research approaches and methods</td>
<td>Change methods for creating a business change Research methods for generating and collecting data</td>
</tr>
<tr>
<td><strong>Actions</strong></td>
<td>Reflective actions, interpretative actions, theory development actions</td>
<td>Change actions - change the regular business practice - research actions (explorative actions, observation actions, reflexive actions and interpretative actions).</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td>Knowledge (theories, models, frameworks)</td>
<td>Change result (to the regular business practice) Data (to the theoretical research practice) Experiences/knowledge about research and business</td>
</tr>
<tr>
<td><strong>Clients</strong></td>
<td>Academia, practitioners</td>
<td>Producers in regular business practice Researchers (theoretical research practice)</td>
</tr>
</tbody>
</table>

The actions performed are also related to different practices. In the theoretical research practice, the actions performed are aiming at developing new theory. The actions performed in the regular business practice are aiming at satisfying the need
of clients. The actions performed in the business change practice/empirical research practice are more complex. One way to understand the actions in this intersected practice is to contrast them to actions within a non-intervening empirical research practice, i.e. no action research is pursued. This means that we here first look at actions performed by researchers. In a non-intervening setting, the researchers will collect data through different empirical research techniques. In an intervening setting the researchers' actions will not be restricted to "pure" data collection. The researchers will act in accordance with a business change interest. Their different actions will contribute to both a business change interest and a research interest.

Many actions performed will be dual in the sense that they will contribute to these both interests. Such actions will be multi-functional. For example the direct participation of researchers in change discussions will give change contributions as well as data contributions from a research perspective. Even when the researcher is more directly working with data generation, this may often give these dual contributions. The observations made will be part of the collected empirical data informing the theoretical research work. The observations made will many times be fed into the change process directly or indirectly. What the researcher has observed in the business practice will inform his further interactions with the practitioners and thus be part of the business change process.

The motives for the researchers to take part in a business change practice will be to create knowledge about such changes. There can be an interest on conditions for change, the change process in itself, change results, change effects or obstacles for change. The researcher has an interest in exploring business change. The action research paradigm is that the researcher will gain more knowledge about change through participating in the change process. Through different actions (observing, reflecting, discussing, proposing, attempting etc) the researcher will explore business changes, i.e. gaining more knowledge about changes.

Actions performed by practitioners may also contribute to these two interests. It is obvious that practitioners will contribute to their own change. Their actions within both regular and change business practices may also give rise to research data (if in some way observed/recorded) and thus will give contributions to the research interest.

The results of the theoretical research practice are new knowledge and the results of the regular business practice actions are products for clients. The results of business change practice/empirical research practice actions are change results for the regular business practice and data to the theoretical research practice. The data can consist of field notes, collected documents, audio and video recordings and also of experiential data, i.e. memorized knowledge by the researchers.

Finally, there are different clients of the practices. The theoretical research practice's clients are the academia and practitioners. The regular business practice has their clients; the users of their products. The intersected practice (the business change practice/empirical research practice) has two kinds of clients: the researchers within the theoretical research practice and business producers within the regular business practice. It is important to recognize that we talk about different roles. The researchers within the empirical practice will generate data (results) for themselves as clients in the theoretical research practice. In this sense a researcher will act as a base provider in the empirical practice creating data for himself (and possibly for his research colleagues) to refine theoretically in the succedent theoretical research practice.

The characterization shows that there are three practices and that they are interlinked to each other (see figure 5). The links between the practices consist of both input and output. The existence of the theoretical research practice and regular business practice is legitimated by the assignments and that they have clients. As discussed above the theoretical research

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2 In a non-intervening empirical setting there will be no intended contribution to a change interest.

3 There may be some data collecting situations, which will have a very low impact on the change process, e.g. follow up interviews performed after the change process has been finished.
practice and the regular business practice have different assignments and clients. The links between the theoretical research practice and the business change practice/empirical research practice consist of a research interest and empirical data as results. The links between the regular business practice and business change practice/empirical research practice consist of change requests and change results. The change request can be seen as an assignment from the regular business practice to the business change practice. In the same way, the research interest can be seen as an assignment from the theoretical research practice to the empirical research practice.

![Figure 5: Three interlinked practices](image)

The main assignment for the theoretical research practice is to develop new theory and the main assignment for the regular business practice is to perform actions that will benefit the clients. The change practice can be understood as the interaction arena between the research practice and business practice where researcher-supported change work is performed. The existence of the change practice is motivated by needs/assignments from both the research practice and the business practice. Further, the change practice is of a more temporary nature than the research practice and the business practice. When the actors in the research practice move to the change practice they also change roles. They become both researcher and change actors. The same goes for the business actors. When they move to the change practice they become change actors. One major reason for the existence of the change practice is that there is a collaborative work between researchers and practitioners. In other types of research approaches where for example interviews are used for collecting data this practice will not exist.

It is important to note that the three practices will be run simultaneously. There will be a continuous flow between the practices. The flow consists of assignments, bases and results. One important aspect of action research is that the cycles between empirical and theoretical work are short and that they are performed continually. This means that data brought back to researcher reflection\(^4\) (within the theoretical research practice)

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\(^4\) This is not to be understood as we deny the existence of joint researcher-practitioner reflections within the business change practice. Such joint reflections will occur and they are often very important in action research. Besides such practical reflections, there will be “theoretical reflections” made by the researchers in their own arena when they have made an intentional distance to the empirical/change arena.
may give rise to modified research questions/hypotheses, which will act as a new assignment in the next cycle of empirical work.

6. An empirical illustration: Action research in home care service

In section 5 we have discussed the conceptualisation of three interlinked practices on a general level. In this section we will give some empirical illustrations aiming at further clarifications (see table 2) of the analysis performed in section 5. For the empirical illustration we use results from a participatory action research project. The project concerned a municipal home care unit for serving elder people. The major tasks of the home care are to help the elders with daily hygiene, simple medical tasks, cleaning, doing laundry, shopping etc. The personnel consist of two home care managers who are responsible for the home care unit and a number of home care assistants. The home care assistants are responsible for the daily work with the elders. The managers and home care assistants have participated as active participants in the action research project (see Cronholm & Goldkuhl, 2002).

The home care assistants are well qualified and experienced. Their work can be characterised as flexible and responsive to the different needs of the elders. This kind of flexibility is also characterising the administrative work at the home care unit. The home care assistants are governed in their work by much tacit knowledge. Documentation routines have evolved gradually. There are many types of documents; a number of self-made as well as pre-printed forms (e.g. journals, diaries, note pads, schedules etc.). These documents are used for communication about clients, assignments, measures and work procedures. In our study we discovered that many documents, especially the self-made forms, were unclear. There were no exact rules for what should be written in different documents.

The terminology was rather fluid. Many documents lacked a clear rubric and after interviewing the staff it became obvious that some documents lacked a common name. From an information systems perspective it is easy to be critical towards this fluid and vague communication and document treatment. There are programs for improved quality assurance in the home care service. There are initiatives made to have a more ensured home care service. Our ambition when working with the home care routines was that they should be designed in ways making it possible even for inexperienced substitutes to perform work in a proper way. This necessitated a redesign of several work documents and the introduction of prescriptive routine descriptions. It necessitated the development of IT-based information systems. In the ISD project four researchers and two home care assistants and two home care managers participated.

One main objective for the home care service is the individualisation of the home care. To perform home care is not a standardised service. The home care unit strives for maximum individualisation. The elder clients should live their lives in their own desired ways. The home care assistants should support the clients to live in their own ways. In order to do this there is great need for knowledge. The home care assistants must have a good understanding of every person, about their personal life history, their current social and medical situation and their habits and needs.

<table>
<thead>
<tr>
<th>Theoretical Research Practice</th>
<th>Business change project/empirical research practice</th>
<th>Home Care Unit (Regular work)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assigner</td>
<td>Academy</td>
<td>Client (patient) ordering home care service</td>
</tr>
<tr>
<td>Assignment</td>
<td>Develop new knowledge, Research application/Research agreement</td>
<td>Research interest, research questions (from theoretical research practice) Change request (from regular business practice)</td>
</tr>
</tbody>
</table>

Table 2: Empirical illustration
### Theoretical Research Practice | Business change project/empirical research practice | Home Care Unit (Regular work)
--- | --- | ---
**Base** | Established and hypothesized research knowledge | Parts of the regular business (to be observed and reflected upon as a base for change proposals) Research knowledge as useful ideas for change | Clients with care needs
**Financial providers** | The Swedish Agency for Innovation Systems | Home care unit and research funding | Client Administration of Health and Social Affairs
**Procedural knowledge, instruments** | Action Research Observation Interviews | Change and methods | Action plans, IT-system, manuals
**Actions** | Reflexive actions Interpretative actions Theory development actions | Change actions - change the home care unit - research actions (explorative actions, observation actions, reflexive actions and interpretative actions). | Regular actions in the home care unit
**Results** | Knowledge (theories, models, frameworks) | Change result (to the home care unit) Data (to the theoretical research practice) Experiences/knowledge about action research and home care business | Services for clients
**Clients** | Academia, practitioners | Researchers, home care unit | Clients of the home care unit

This partially changing knowledge must be transferable to all members of the home care team since there is not one single assistant who takes care of a particular elder. One objective of the IS to be developed was to contribute to this knowledge sharing (Goldkuhl & Röstlinger, 2002).

As you can read in table 2 there is for example different assigners, financial providers and clients. In other words there are different conditions and results for each practice. This means that practices have different responsibilities but through a common interest can they fulfil their commitments. This is done by collaboration. This illustration can be seen as an empirical grounding of the conceptualisation made in section 5.

### 7. Conclusions

In this paper we have proposed a practice perspective for conceptualising action research. A way to understand action research is to describe three distinct but interrelated practices. The use of the generic model of work practices (ToP) has revealed that there are different assigners, assignments, bases, financial providers, procedural knowledge and instruments, actions, results and clients for the practices. We have also described how the three practices are interlinked to each other. McKay & Marshall’s (2001) claim that there are links between the problem solving and research cycles in AR. But in their study the meaning of the links is unclear. The links that we have identified show how the research practice and the business practice are benefiting from each other.

As pointed out in section 1 a common criticism against participatory action research is that it lacks from scientific rigor (Kemmis & McTaggart, 2001). There is a risk of a fuzzy understanding of action research. A mix or reduction of the concept action research could lead to confusion, communication problems or authority problems among the researchers and the business actors. In this paper we have tried to be more rigorous when discussing the concept of action research. We have in a methodical way analysed conditions, action and results in order to further understand the concept and to show that there exist different practices.

Avison et al (2001) raise the question of authority and asks “Who is really in charge of the research project?”. It is unclear
which of the practices Avison et al are thinking of when asking the question. As we see it the researcher is always "in charge" of the theoretical research practice as well as the business practitioners are "in charge" of the regular business practice. In the business change practice/empirical research practice, the researchers are “in charge” of the empirical data collection part and the business practitioners are “in charge” of the business changes (see figure 5).

Lau (1997) discusses action research in terms of classical and emergent action research. Classical action research views the researcher as an expert and the participants as subjects. Emergent action research views the researcher as collaborators and the participants as co-researchers (ibid.). Heron & Reason (2000) proposal can be classified as emergent action research. As a consequence of our findings, we do not agree with Heron & Reason (2000) when they claim, “all the subjects are fully involved as co-researchers in all research decisions – about both content and method – taken in the reflection phases”. The researchers have as “research producers” a responsibility for their results and must of course therefore be able to take responsibility for the choice of research questions and methods. The reason for not agreeing with Heron & Reason (2000) is that they seem to miss that there exist different conditions for the practices (see section 5). Of course, action research is about collaboration and we agree with viewing the business actors as active project members rather than passive information deliverers, but the collaboration takes primary place in the change practice and not in the theoretical research practice.

We are not favouring classical action research but we think that the proposal from Heron & Reason (2000) is too radical and takes participatory action research one step too far. On the other hand, if the researchers’ goal dominates the process of inciting actions there is a risk that the actions may not be guided closely enough to the change problem. Baskerville (2001) calls this risk for the “First-Degree Outcomes Failure”.

Lau (1997) means that action research provides a unique opportunity to bridge theory with practice, allowing one to solving real world problems while contributing to new knowledge. In this paper we have made the bridge explicit through discussing a third practice, the business change practice/empirical research practice.

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The Undergraduate Dissertation: Subject-centred or Student-centred?

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Abstract: Our paper is designed to stimulate discussion of the undergraduate research process. We use recent changes in the dissertation process at Coventry Business School as a backdrop for exploring the authors perceptions of two extreme types of teaching: the subject-centred and the student-centred. We conclude that the subject-centred approach is dominant and it would seem to leave little room for continuing professional development of academics or students. Both authors will offer examples from their own reflective practice.

Keywords: Research methods, facilitation, learning environment

1. Background

For a number of years the undergraduate dissertation process within Coventry University's Business School has been a wholly individual one in the sense that supervisors were allocated individually to students after completion of a very basic project proposal. A series of ad hoc meetings would follow between the two parties, hopefully resulting in the student engaging with literature and the researched to produce a coherent project.

This process was fraught with difficulty. From the supervisor’s perspective, the student was probably unknown. Any understanding of the student’s strength and weaknesses possibly picked up from a few brief meetings in pressured moments between teaching, marking and preparation. Hours allocated by timetable managers bore little relation to the time spent with the student if the job was done well.

For the student, their stories indicated that they often felt cast adrift into a process that somehow staff expected them to be able to cope with once they had reached their final year. Some staff were sought after rather than others because they seemed more student-centred and/or had research experience of their own. Therefore, the student experience was increasingly shaped by the allocation of supervisor. The dissertation was squeezed into the ever-increasing deadline demands of the final year. Most left the substantial work until the final term, adding more time pressures into the process. Academic staff found themselves with as many as twenty Honours projects to supervise. Often the initial stages of project development were similar for many students, with staff repeating much of the advice on, for instance, developing a research question. With a reorganisation of the undergraduate programme in Coventry Business School it was decided to revise this process.

2. Changes in the process

As a result of curriculum development Honours students now meet their supervisor in a group setting during the first term and have supporting lectures. This may have initially been driven by a need for efficiency but it has led to research methods moving to a central place in the final year curriculum with formal assessment being made of a literature review and a reflective journal, as well as a mark being awarded for the final project. As Davis states (2003:243-244)

‘The Higher education environment is changing and this is particularly so in the post-1992 higher education institution… increased accountability makes reflective practice something beyond the vision of many.’

Overlaying the changes in the dissertation process are broader contextual issues that have increased the pressure on academic staff. Perhaps it is not surprising then, that although this ‘new’ teaching style seems to be accepted by the students, there have been some notable tensions and difficulties amongst staff. Some of those tensions and difficulties will be explored in this paper.
First, as part of a group the student follows a programme with a staff supervisor concentrating on crafting and then presenting a research proposal, then finally an assessed literature review. Secondly, the student goes forward to carry out the research and produce the final document to their respective supervisor who acts as first marker. This is a dramatic change in the process. For staff it is now necessary to devise some form of ‘programme’ which encompasses supporting individual students in a group setting whilst dealing with all the group dynamics that such teaching involves. For those more comfortable with an authoritative form of delivery this style of facilitative teaching is a challenge. Merely presenting a set of notes on research methods is not sufficient to satisfy students who need to address individual ideas and potential pitfalls based on their respective study skill aptitudes.

3. Our context

Our position/context is very broadly postmodernist/social constructionist. Most notably we share an interest in developing our teaching styles to move as far away from students as ‘serviceable others’ (Sampson 1993) as we can. In his text ‘Celebrating the Other’ Sampson outlines how:

‘When I construct a you designed to meet my needs and desires, a you that is serviceable for me, I am clearly engaging in a monologue as distinct from a dialogue. Although you and I may converse and interact together, in most respects the you with whom I am interacting has been constructed with me in mind.’ (p. 4).

Building on the work of other authors (Cixous and Clement, Gatens) he goes on to state that ‘To know the other on its terms is too menacing. Discard after use’. We believe that there is a monologic that allows academics, for instance, to appropriate the work of undergraduates. Undergraduate research is considered to be (obviously) unoriginal and worthless unless it covers material needed by an academic for their own research (3rd ECRM 2004 Keynote Speech). The process of discarding after use is relatively easy in Higher Education as undergraduate students pass through Universities on a regular three or four yearly cycle.

To aid us in maintaining focus, in this paper we accept unconditionally that undergraduate projects are a valuable part of the development of undergraduate students, and accept without question that the skills of reflective practice are essential to undergraduates and academics alike.

4. Implications for the student-teacher relationship

To help us explore some of these issues we began by articulating two extreme types of academic and their approach to teaching: the subject-centred and the student-centred. They are stereotypes and can be criticised as such but we found them to be a useful starting point. Although we recognised that guiding independent student research is very different to teaching large groups of undergraduates [100+] on a structured module, we also recognised that ‘the pedagogical impulses of the teacher/supervisor impact on the quality of the experience for the students’ (Entwistle 2003). In the following table we began to explore what these approaches implied for the student-teacher relationship and the wider university context:

Table 1: Subject-centred and student-centred teaching

<table>
<thead>
<tr>
<th>SUBJECT-CENTRED TEACHING</th>
<th>STUDENT-CENTRED TEACHING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge is transferred from academic to student</td>
<td>Students and staff as facilitators and enablers</td>
</tr>
<tr>
<td>Buys into the student need to get a 2:1 as easily as possible</td>
<td>Honours the student experience</td>
</tr>
<tr>
<td>This type of teaching is easily measured</td>
<td>Not easily measured using standard questionnaires</td>
</tr>
<tr>
<td>If the lecture style is good and easily understood the lecturer will get favourable reviews from the students</td>
<td>Can cause tensions between lecturers and students as well as lecturers/other lecturers. May not get such good reviews</td>
</tr>
<tr>
<td>Implies quite a comfortable easily understood relationship with students</td>
<td>Image amongst others academics that this is ‘mickey mouse’, ‘easy’ and not ‘real academic work’</td>
</tr>
</tbody>
</table>
It is our contention that these two approaches influence to a large degree the learning environment in which research supervision takes place. In respect of subject-centred teaching, knowledge is seen as a ‘right of passage’ between academic and student, it is as though the student is being inducted into a select club. Wilmott (1997) has commented on the world projected by such practice as ‘an exterior object to be learned about’ and that some notion of correct practice defines the formal curriculum. The ‘club’ with its ‘experts’ decides on what should be learnt, when and how much’. In contrast, student-centred teaching in this respect focuses more on what students and staff ‘do’, on how different knowledges are facilitated and enabled (Vygotsky 1978). Moreover this is a different view of the world where the latter is a ‘contigous subject to act upon and change’ (Wilmott 1997). The supervisor’s role is more of a facilitator helping the student to tackle problems. This may involve the student taking an active role in bringing to the fore particular knowledge they possess from their experience of full-time and part-time work, or assisting peers with critical questioning and dissemination of information, for example.

Learning environments also differ. Subject-centred learning is delivered more through the formality of lecture and seminar, as opposed to a workshop setting where objectives are more open-ended, driven by student need rather than the transfer of the lecturers subject knowledge. As indicated in Table 1, these different styles have relevance for measurement. In an audit culture, the formal lecture and seminar lends itself to adopting measurement tools common to other modules being taught across a department or School. However, the informal workshop setting, with its emphasis on individual/group need that changes as the project supervision progresses, is not so easily quantified in our experience. There are parallels here with the pedagogic approach developed within action learning (Revans 1982) in that the fundamental idea is to bring people together to learn from each other’s experience. Students are encouraged to explore possibilities rather than being led.

5. The post 1992 environment

However, we also believe that this environment is being influenced by particular contextual factors that impact on this immediate micro-teaching environment. Both authors have experienced a symbiotic relationship forming between the needs of both students and staff in the ‘Post 1992 University’. The increasing size of groups for lectures and seminar/workshops within our Business School, without attendant growth in staff and administrative resources, has contributed to an increased need to ‘play safe’: students seem reluctant to challenge the status quo and staff are reluctant to do anything that might involve more preparation, or even different ways of preparing. This pressure has been compounded by greater demands for accountability and the trappings of institutional audit (QAA 2004).

<table>
<thead>
<tr>
<th>Reflections from Honours project students</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the first term one group of final year Honours project students were asked what barriers there were to reflecting on how they researched, and linked to this what barriers they perceived in turning these reflections into action. Students stated (in their own words):</td>
</tr>
<tr>
<td>Not enough time; Overload of information; I do not reflect on my experiences very often because… if I don’t have to do it then I won’t do it; No commitment to the idea; Too difficult to do; Sometimes I don’t dare to reflect in case I have made a mistake which sets me back rather than forwards; No time to research a new way of going about doing things; I need good feedback to move on to the next stage; Fear that a new way of doing things may cause more problems than benefits; We become comfortable with how we do the things we do and subconsciously go about it in the same ways.</td>
</tr>
</tbody>
</table>

It is our belief that student-centred teaching practices help to break down all of the barriers to reflection identified in the boxed example above. Students may have
experiences and pressures that create a very different context to that experienced by students in the past and this type of teaching recognises and values this. Working in a group with other researchers can lead to the sharing of resources and ideas, saving time and relieving many of the anxious feelings apparent in the comments above.

Moreover, in a pressured Higher Education environment where accountability in the form of audits and questionnaires is a driving force, it is easy to see why, for many academic staff, there is no logic in turning their attentions to reflective practice. It is not likely to be an easy pedagogical shift and it seems to offer challenges to previous practice and the status afforded by subject expertise.

6. Changes in the student environment

It has been noticeable also that student perceptions of their University experience have changed. Increasingly we seem to be working with the demands of what could be termed the ‘2.1. syndrome’. There appears to be an acceptance that without a 2.1 honours degree a student has basically ‘failed’. This pressure to achieve is coming from a variety of sources (CSU 2004, HEFCE 2002) such as employers who, given the plethora of business studies courses from a range of institutions, are using the 2.1 as a blanket indicator of quality of applicant. According to a Graduate Market Trends report from CSU, the Higher Education Careers Service Unit, twice as many jobs now require postgraduate qualifications compared with the period 1998-2001. This screening process has gone further. A HEFCE report recently highlighted trends amongst major commercial organisations to screen out graduates with fewer than 22/24 ‘A Level’ points, such graduates not being allowed to attend open-days or obtain application forms.

Both authors have been informed by students (before work has been assessed) that a mark in the ‘2.1 range’ is their expectation. In one extreme case a student had to be warned that continued ‘instructions’ of her expectation of such a grade might be construed as harassment. This pressure to succeed, compounded by increasing financial pressures to get ‘a return on the investment’ of fees and accompanying student debt¹, seems to sit comfortably alongside the staff need, identified earlier, to smooth the passage of teaching.

The arguments above only begin to scratch the surface of this complex issue. For us they suggest a dichotomy for academic staff: they can honour the student experience with the potential for confrontation, as the student may perceive a failure to fulfil their needs, or treat the student simply as a consumer and ‘give them what they want’.

7. Implications for the research/supervision relationship

So how do these two extreme types impact on the research/supervision relationship? For example, if supervision is regarded as an invitation to pre-existing knowledge then research is clearly an individual activity of absorbing and analysing knowledge of that subject area. Alternatively, if supervision is regarded as student-centred the theoretical underpinning for its practice is founded upon the collective/social nature of research, for example, Action Learning (McGill and Beaty 2001). The following table recognises the differences that may result from adopting these different approaches to supervision.

The positions of ‘subject’ and ‘student’ we believe are centred on the different ‘theory in use’ (Argyris and Schon 1974) as regards supervision practice. The experience that learners have is fundamentally grounded in the assumptions that drive supervisors (Cunningham 1991). It is rare in our experience for colleagues to recognize and rethink such assumptions. At a time when reflective practice has been promoted throughout Higher Education as a valuable way to develop lifelong learning skills (Dearing 1997, Skills Development in Higher Education CVCP, DfEE, 1998), within a highly politicised academic environment it could be seen as expedient to espouse the rhetoric of involvement, whilst at the same time continue to

¹ Average student debt after graduation now stands at £12,069, compared with £2,212 in 1994. The projected figure for 2010 is £33,708. Barclays Bank Annual Survey of Student Debt 2004.
supervise in an authoritative manner. Assumptions, therefore, of a more subject-centred position towards supervision are rooted in the view of the researcher as an individual agent pursuing his/her inquiry, welded to the supervisor and their subject knowledge, without recourse to others who may support/challenge such endeavours outside of the supervisory relationship. Whereas a more student-centred position on supervision recognises the social/collective nature of research; in that the student is not apart from the learning community but a part of this social domain that extends out beyond the academic institution to include fellow course members, flatmates, workmates at their place of part-time employment, and their families.

**Table 2: Subject-centred Supervision/Student-centred Supervision**

<table>
<thead>
<tr>
<th>Subject-centred supervision</th>
<th>Student-centred supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical basis is the individual nature of research</td>
<td>Theoretical basis is the social/collective nature of research</td>
</tr>
<tr>
<td>Positivist approach to teaching and learning, Formulaic.</td>
<td>Reflective/Action Learning approach</td>
</tr>
<tr>
<td>Objective knowledge that can be transferred</td>
<td>Subjective knowledge? Or at least a recognition that the sheer volume of knowledge increases the importance of researchers being skilled in researching rather than simply knowledgeable</td>
</tr>
<tr>
<td>Power discourses of knower as expert</td>
<td>Recognition of the wealth of knowledge and experience present in the student body. Particularly with the increase in mature students/part-time students and students that are in employment whilst studying</td>
</tr>
<tr>
<td>Potential arrogance/Superiority</td>
<td>Recognition of the power relationship of supervisor/student researcher. There is an authority arising from research experience, position, control over assessment etc. The question is more how you act with that as a supervisor? What do you do with that?</td>
</tr>
</tbody>
</table>

8. Power and authority

It would be naive to engage in such a discussion without recognising the differing power relations between the supervisor and student. That authority arises from research experience, publications record and academic position. There are many discourses of teachers as dominant forces stretching back through time resulting from:

> ‘the division of knowledge by distinct departments, the reliance on lectures and texts as pedagogical practices, the use of examinations to test student knowledge and the existence of highly select colleges and universities’

(Gergen, 1994, p.ix)

This is not going to change in the immediate future but shifting the focus of teaching to the student goes some way to address this and deal with some of its limitations. We would argue that the crucial factor is how the supervisor works with that power relationship. The subject-centred position reinforces the stance of the individual researcher, and discourages the student from recognising that learning can take place beyond the supervisor; that they themselves may have an insight into their own organisations that their academic supervisor does not. Moreover, there is a collective dimension that is missing from this subject-centred stance. We sense that there is much to be gained from developing awareness amongst final-year students of the collective dimension of organisational life (Cunningham and Dawes 1997). That learning in organisations, which we hope the student will embrace in the very near future, is not a totally individual reflective process but comes through interaction with others, both from within and outside of work.

Both authors were recently engaged in a review process of suitable texts to support their groupwork for the newly developed undergraduate research module. What was startlingly obvious from this process was the absence, in most of the texts, of any mention of the supervisory relationship or the emotional rollercoaster that many of our students experience in their final year. It is our contention that by adopting a more student-centred approach to supervision, this emotional dimension can be recognised and addressed. If
supervision is seen purely as a rational thought process of creating a question, deciding a methodology, determining existing literature and then analysing data towards a conclusion, then the context in which any of this takes place for the student is ignored. Our experience of group sessions has been marked by strong emotions being expressed of ‘not coping’, ‘resignation’ and a sense of being ‘swamped’ by deadline demands. However, as a group, they can be enabled to offer support and advice to each other, to recognise that ‘they are not the only one’ and listen to feedback offered to individuals that may be relevant to their own situation.

Undergraduates are unlikely to be experienced researchers, and are therefore likely to need support and encouragement to develop confidence in their abilities and knowledge before they even begin to develop the more formal skills of research. This may seem obvious, but undergraduate research textbooks tend to overlook the emotional dimensions of the research process (e.g. Saunders et. al. 2003).

9. Conclusions
We have suggested throughout that contextual factors impacting on both the work of academic staff, and their students, play a large part in shaping the resulting supervisory relationship. To work with these factors involves challenging assumptions that are at the heart of professional practice.

In conclusion, the subject-centred approach would seem to make teaching into ‘just a job’. There is little room for continuing professional development (Schon 1983), only in increasing subject knowledge. The limitations for students are more profound, perhaps a formulaic approach to research could curtail any interest in research long before it begins.

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Increasing business students’ Confidence in Questioning the Validity and Reliability of their Research

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Abstract: Business students like to think that their research is of practical value but rarely have the confidence to question the validity of the data they have collected. Teachers expect that students will demonstrate a critical awareness of the limits of their own and others' research. The paper outlines different ways of teaching students how to recognise the key issues surrounding validity and reliability and how to make generalizations from their research.

Keywords: business, research methods, validity, reliability, teaching, learning.

1. Introduction

In this paper we categorise a number of different approaches in the literature to teaching business students about validity, reliability and how and where to generalise from their research. We distinguish four categories in the research methods literature, which we characterise as the positivist outlook, the phenomenological, the embedded, and the skills-type. Informed by these different ways of dealing with the subject, we describe three different approaches to teaching students how to assess the validity, reliability and extent to which data they have collected and things that they have read can be generalised. The aim of this ongoing research is to establish teaching methods that enable business students to think about information within a context, assess the value of the information and become critical independent learners.

Much student written work in business and management, whether for course work assignments or undergraduate and Masters dissertations, neglects to consider whether the data relied on as sources for the assessed work is academically rigorous, or indeed whether the assemblage created by the student will itself withstand rigorous scrutiny.

Our experience as teachers in higher education is that students tend to look at information in isolation. When required to search for or use information, students at both undergraduate and post-graduate level are no longer to be found in libraries surrounded by shelved books, but in pooled computer rooms, downloading information while exchanging messages with friends and playing the odd online game. The modern context of study and research thus exacerbates the problems many business and management students seem to have of thinking about information and linking it together. Perhaps there is a generational change in the approach to information and usage, as material is so frequently read out of context.

Students’ ability to question what is being collected and read is impaired by this atomisation of information gathering, so that little attempt is made at linkage and synthesis during the information-gathering phase. Although in many cases, the assessment criteria may require students to reflect in their written work on the validity and reliability of the information they have assembled, too often this is also decontextualised, with reflection coming too late in the process. It is then viewed as a bolt on necessity to meet marking criteria, if done at all.

As teachers, we need to acknowledge this change and to develop ways of making knowledge that was either taken for granted (Thomas 2003) or was implicit (Berry 1997) explicit by, for example, ensuring that it is formally taught, practised and assessed. There is some psychology and education literature on implicit learning that demonstrates that it is clearly a process (Reber 1967) but unfortunately it is one that is little understood, and where research is bedevilled by problems of methodology and measurement (Atherton 2002). A search through the research methods literature enabled the authors to identify four categories of approaches taken by
various authors when trying to explain and apply the concepts of validity, reliability and generalization in business and management research. A discussion of these four categories now follows.

2. The literature

2.1 The positivist view

Management research in the past and much that is still carried out today tends to emanate from a broadly positivist approach to the discernment of reality. If the assumption is that most research is likely to take place within this paradigm, then it makes sense to discuss issues such as validity, and reliability within the confines of a discussion where the issues fit most conveniently, such as in a chapter on sampling. Empirical social science research, on which so much management research draws for its philosophical approach and research methodology, uses four validity tests (Yin 2003). These are construct validity, internal validity, external validity and reliability.

The key test for validity is sometimes presented as whether what was found was a response to the questions originally asked. A common explanation of the term is whether what has been measured is actually what was intended to be measured when designing the research (Mason 1996, Collis and Hussey 2003). Some textbook authors describe this as face validity, (Collis and Hussey 2003) others as internal validity, yet others as measurement validity (Saunders et al 2003). In a quantitative study, the test for internal validity is how confident the researcher is that the independent variable is at least partly responsible for the variation found in the dependent variable (Bryman and Bell 2003). If the initial purpose of the research cannot be answered, because the data actually collected answered a rather different question, then there is no internal validity. A second aspect of validity, external validity, is whether the results could be applied to other contexts or situations and to what extent this may be possible. In quantitative studies the representativeness of the sample is the key issue in generalising to a larger population.

Among recently published business research methods textbooks, Cooper and Schindler (2003) may be taken as exemplars of the positivist approach to business research. In a book that deals only with quantitative empirical approaches to business research, chapter eight discusses methods of evaluating a research tool used for “scientific measurement” (p231) in terms of its internal validity, reliability and practicality, the last being defined as economy, convenience (for the respondent) and interpretability. The guidance to the putative researcher is not always very clear. For example, Cooper and Schindler sub-divide internal validity into three aspects. The first is content validity – the test is does the measure adopted fit the data that is to be or has been collected? This is a judgemental issue, and they suggest the designer of the research, and an independent panel of experts can best judge it. This is hardly objective, and not very positivist. They also discuss what they describe as criterion-related validity – the success of the measure to predict an outcome. For example, opinion polls may be used to predict the outcome of an election (predictive validity), or correctly to categorise something (concurrent validity). They suggest that again this may be difficult to validate in practice, with the researcher able only to use other secondary data. This begs the question as to the utility of the original research - if the secondary data is so good it is arguable that you would not be doing the new research in the first place. Their discussion of construct validity offers even less guidance, suggesting that it is an abstract concept, which makes it harder to validate, and the researcher needs to consider the theory and the measure together.

In the positivist paradigm, much of the history of thinking about the validity of research design comes from experimental research (Cooper, 1998) yet even for these highly quantitative studies, the issues are not as clear-cut as they may first appear. Experimental researchers use triangulation, for example when less than “perfect” studies have to be carried out. Later researchers have expanded the eight threats to internal validity in experimental research originally distinguished by Campbell and Stanley 1963 (cited in Cooper 1998). Similarly, although external validity was originally
seen as relating to the generalisability of the research based on the rigour of the research design, subsequent studies have referred to population validity, ecological validity and added other validity parameters, such as statistical validity. The whole approach is problematic – different researchers use different lists of threats to validity classified under different headings, and there is no established guidance as to the relative weight to be given to each of these. Cooper (1998) concludes that the important point is that the rigour of the approach and the transparency of the thinking are made clear – not whether a checklist or some other didactic method of teaching incorporates all these dimensions.

Reliability is sometimes seen as an assessment of whether the same findings would be obtained if the research were repeated, or if conducted by someone else. This definition is problematic in business and management research as any social context involving people makes replication difficult (LeCompte and Goetz 1982). In a quantitative study reliability is about the consistency of results, and the robustness of the measure, and whether it is free of random or unstable error. According to Cooper and Schindler (2003), stability, equivalence and internal consistency are key concerns. Reliability estimates, they suggest, can be of three kinds: test-re-test, whereby the same sample is asked the same questions again a few weeks later; an estimate or whether alternative forms of the same measure produce similar results – so these are administered at the same time; and split half correlations using Kronbach’s alpha or KR 20, which measure the degree of consistency between say the two halves of the answers to a questionnaire.

Evidence cited by Bryman and Bell from published quantitative research in organisation studies (Podsakoff and Dalton 1987) suggests that authors seldom report tests of the stability of their measures and only three percent of the articles they looked at provided evidence on tests for validity.

2.2 The phenomenological view

Validity, reliability and issues to do with generalization can also be discussed when considering qualitative research designs. The problem is where to deal with it, and what to say. While some authors seem to contend that what we have described as the positivist view is applicable to other research methods and approaches out with this paradigm; others argue strongly that it is not applicable. Some writers do not think these criteria are ever relevant, for example measurement has arguably little sense in qualitative research, so it is questionable whether the issue of validity is of concern at all. External validity can be seen as a potential problem, because the use of case studies and small samples makes it hard to generalise to other cases or wider populations. Generalization is seldom dealt with at any length in discussions of qualitative research methods, and is actively rejected by some authors as an objective of qualitative research (Schofield 1990).

Other authors do suggest that validity and reliability are relevant to qualitative research. LeCompte and Goetz (1982) contend that external reliability (replicability) does have a parallel in qualitative research, for example in repeat focus groups or ethnographic studies, where it is important to mirror the role adopted in the first study by the researcher in subsequent ones. Internal reliability has a parallel in qualitative research in terms of inter-observer consistency, which is a test of whether observers see the same things. Internal validity can be seen as a strength of qualitative research (Bryman and Bell 2003) because the researcher spends so much time over a long period on observations, and so is able to ensure a high level of fit between observations and concepts.

Other writers adopt a different stance on qualitative research. Guba and Lincoln (1994) propose two key criteria for
assessing qualitative research – trustworthiness and authenticity. Trustworthiness has four aspects in this scheme. These are credibility – attested to again by triangulation, or by confirmation by those who were researched that the investigator correctly understood what was going on. The second is transferability; a key test here is whether the data is sufficiently rich to enable other researchers to make judgements about its possible transference to other contexts. Boosting the trustworthiness of qualitative research could be achieved by getting peers to audit your research process to confirm that it was carried out correctly - this is dependability. While this initially appears simpler to apply, it hinges on the systematic documentation of every part of the research process followed by extensive use of auditors to check the process. The auditing process may be carried further so that auditors could also check that personal or theoretical inclinations have not caused researchers to bias the research. This they describe as ‘confirmability’.

Authenticity also has four criteria, according to Guba and Lincoln, concerned with the wider context of the research. These include fairness – does it represent all viewpoints in a particular setting? For example, were employees from all levels interviewed or just senior managers? (Does this matter if you only want the views of senior managers?) Another criterion is ontological authenticity – does the research help to enhance understanding of the social context? They also suggest three other aspects of authenticity which reflect their views as critical theorists – educative authenticity (has it helped people in the research to appreciate others’ views in their setting) and catalytic authenticity (has it acted as an impetus to participants to change things) and tactical authenticity – has it empowered them to do this?

Common sense and the practicalities of doing research start to collide with some of these visions. Auditing a qualitative research study would be a massive undertaking, given the quantities of data involved, and it would be difficult to guarantee the independence and rigour of the auditing process itself. Would it be done by another institution? Or even by researchers from another discipline or research tradition? Would the results be proportional to the efforts involved? Writing on ethnographic research, and so firmly in the qualitative camp, Hammersley (1992) takes a less extreme view, and suggests that the plausibility and credibility of a researcher’s claims are the key issues in qualitative research. Relevance is also crucially important, judged by an assessment of the importance of the topic within its field and what contribution it makes to the literature.

Generalization is sometimes seen as a weak point in qualitative research: a case study is not a sample of one it is not a sample at all (Bryman and Bell 2003). This is potentially a big problem for business research. A lot of management research is based on in-depth case studies in a few companies over a long period, but we simply don’t know if success or disaster in one company can be generalised to others (Raimond 1993). Many writers seem to agree that the findings of qualitative research can be generalised only to theory and not to populations, and this underpins much social science thinking. It is the quality of the theoretical inferences that makes qualitative research generalisable. However, some authors make bolder claims. Yin, a management researcher who, though a leading proponent of the case study method adheres to a broadly positivist frame of reference, suggests that replication of case study methods can achieve greater generalisability of theory (Yin 2003). Schofield (1990) argues that judgements about the match between the single situation studied and others to which one might be interested in applying the concepts and conclusions of that study is what enables qualitative researchers to make informed judgements about where and to what extent they can generalise results. She contends that careful selection of the typical, or of situations judged likely to become so in future, or those that are exceptional can increase the generalisability of qualitative research.

2.3 The embedded view
Another way of dealing with issues of validity, reliability and generalization within research methods is to embed discussion of these aspects within learning about each discrete research method. There are arguments both in favour and against this. In favour of this approach is the suggestion that these issues are part of
thinking about any research design, strategy, or method and are key issues in analysing data and drawing conclusions. It is important therefore to discuss them at every stage of a research project. Unfortunately, these discussions can then become quite rather mechanical and repetitive.

Issues of validity, reliability and generalization need also to be considered when reading, discussing and analysing secondary data, and within the context of applying management theories to case studies. A common problem for students at various levels is to assess the extent to which their findings may be applied to another context (Vogt 1993), but in practice very few authors attempt to provide thorough advice on this. A notable exception is Raimond (1993). In three chapters of his book on research design, he considers the research validity, the reliability and the generalisability of the conclusions of Peters’ and Waterman’s In Search of Excellence, Michael Porter’s industry analysis and his generic strategies, and Hofstede’s Culture’s Consequence. He takes the reader step by step in examining the premises of their arguments, their research designs and methods, the underlying logic of their argument, empirical tests of their reliability and generalisability and the conclusions they draw. There are useful additional lessons to be drawn from these studies, as viewed in historical perspective, as each is now at least twenty years old. Additional tests of reliability and generalisability not found in the research methods literature reviewed above apply here in terms of the currency of the research and its applicability in different cultural contexts. For example, Peters and Waterman looked at 63 excellent companies and tried to ascertain what the lessons were that could be learnt from their success. By the mid 1980’s 14 of Peters and Waterman’s companies were in trouble. The applicability of Hofstede’s research in one organisation to generalizations about national cultures is also a key issue in terms of its generalisability.

2.4 The skills view

Trying to make our students more critically reflective, and reflecting on the validity, reliability and generalisability of what they read think and collect in terms of data is all part of the learning process. Learning means different things to different people. Säljö (1984) classified the conceptions held by respondents in his interview-based study into five categories. The first three are categorised as a surface approach to learning. They are acquiring information or “knowing a lot”, storing information that can be reproduced, and retaining facts, skills and methods that can be used as necessary. Categories four and five equate to higher level deep learning: learning as making sense or abstracting meaning, and learning as interpreting and understanding reality in a different way.

One of the goals in our teaching has been to help students to develop a critical approach, which we would classify as deep in the sense described by Marton and Säljö (1984). As reported previously (Smallbone and Quinton 2002) we have been trying to help students to develop a critical approach through the encouragement of critical reading skills. The rest of this paper discusses three different approaches to teaching validity, reliability and generalisability, which we suggest encourage deeper learning at undergraduate and Masters level through emphasising the development of skills of reflection on the validity, reliability and generalisability of research within a critical framework.

3. Teaching validity, reliability and how to generalise

Drawing on the research methods literature, and our knowledge of the way students learn, and the motivating impact of assessment (Ramsden 1992), we distinguish three approaches to encouraging students to learn about and to practise the critical skills associated with learning about the validity, reliability and generalisability of their own and others’ research.

One approach, used on most undergraduate assignments in the Business School, at Oxford Brookes University, consists of creating and using an assessment grid (see O’Donovan, B, et al 2003), which the students are given (see table 1 below for an extract from one of these). There are no specific marks attached for critical application of reliability, validity and generalization, but it is assumed that in order to achieve an A
grade implicit consideration has been given to the rigour of information used within the discussion of range of sources.

Table 1: Assessment criteria grid.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>A grade</th>
<th>B grade</th>
<th>C grade</th>
<th>Refer/Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of literature / evidence of reading</td>
<td>Has developed and justified argument using own ideas based on a wide range of sources which have been thoroughly analysed applied and discussed</td>
<td>Able to critically appraise the literature and theory gained from a variety of sources, developing own ideas in the process</td>
<td>Literature is presented uncritically, in a purely descriptive way and indicates limitations of understanding</td>
<td>Either no evidence of literature being consulted or irrelevant to the assignment set</td>
</tr>
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</table>

Although useful in enabling teachers to explain with some consistency what students need to do in order to achieve particular grades, our experience in practice is that this is a rather oversimplified indicator and that only the most able students actually manage to unpick the meaning of the grade criteria. As they are not specifically mentioned, the less analytical students do not register the need for thought about validity, reliability and generalization and so this method is of limited usefulness on its own.

A more detailed and explicit approach involves teaching the students, in seminars, how to deconstruct a journal article using a framework to help them analyse and assess the value of the paper (see table 2 below). The methodology and methods are examined and discussed and students practice critically reading a paper so that they can begin to recognise rigorous research (or the lack of a rigorous approach). It is the intention that the students then apply the same principles to the data they read and collect for their assignments.

In this instance the students were asked to read an article by Shoham and Dalakas (2003) concerning the role of parents and teens in family decision making in Israel prior to a seminar. The subsequent seminar was entirely devoted to the reviewing of this article. A fairly lively discussion commenced about the value of the paper and the weaknesses in the method used, which the students seemed to identify easily. Shoham and Dalakas had in the article, unusually, briefly reflected upon the limits of the validity, reliability and extent of generalization of their research, including their use of a convenience sample, which they defended with some vigour. However it was interesting to note that although the students could identify many weaknesses they did not question the validity, reliability and generalisability of Hofstede’s work (1984) on which the paper was entirely based, but which it did not question. Therefore it would seem that this approach created some awareness of these issues, with the students being able to assess the rigour of the immediate research, but they still lacked the confidence or the ability to tackle the validity of the assumptions underpinning the research.

Table 2: Critical reading framework.

| What to look at:                                                                 |
| Date – when was the research reported on actually done? |
| How current are the results? |
| Author’s credentials? |
| Data collection methods – what did they actually do? |
| Style                                                                 |
| Is it constructed clearly? |
| Can you follow the argument through a logical development? |
| Does the use of tables, charts and diagrams add value to the conclusions or the explanation? |
| Analysis                                                               |
| What is the central issue dealt with in the paper? |
Having used table 2 for eighteen months, the authors felt that it required adaptation based on feedback from students. The critical framework has now been separated into two templates, one for papers discussing primary research as in the example cited above and a second template for purely conceptual and theoretical papers, for example literature reviews. The second template asks questions such as how do you assess its academic quality? It will be piloted in September 2004, with both undergraduate and postgraduate level business students.

Our third approach is to combine these two steps and to go one step further and to link the issues of validity, reliability and generalization explicitly to learning outcomes and to the assessment criteria, see table 3 below. As part of their assessment on one core module, which we jointly run in the second term of the second year, undergraduate marketing students write an essay. For the first time, this year the explicit assessment criteria include that it must contain a minimum of 8 cited references and 400-500 words on the validity, reliability and generalization of the sources used, out of a total of approximately 3000 words. Marks are attached to each of these criteria. A short teaching session on how to meet these criteria was run as part of the module.

Table 3: Linking validity, reliability and generalization to assessment criteria.

<table>
<thead>
<tr>
<th>Criteria and format</th>
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<tbody>
<tr>
<td>Your essay should contain an introduction, several developed themes and then a conclusion or series of conclusions. It is essential that it is based on a wide range of reading and it is important that you draw on the main theories about buying behaviour and critically review the material you use. Between 400 and 500 words of your assignment should assess the significance, validity, reliability and the extent to which any of the sources you draw on can be generalised.</td>
</tr>
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The Business School requires all written work to contain a bibliography. For this module you are also required to include citations in the text and a list of references that will include at the minimum eight different sources, of which a minimum of three should be books and a minimum of three articles from academic journals. References must be both cited in the text and listed at the end of the report.

The Harvard system of referencing is to be used. The total number of words should be no less than 2,500 and not be more than 3,500.

The outcome was that the better students made an attempt to meet the criteria, but many tended to write an essay drawing on a few key sources, and then in a separate section denounce these same sources. The reasons given were legitimate in terms of developing an approach to validity and reliability, and included the use of small or convenience samples, limited applicability outside the study’s immediate context, being culturally specific and hence not generalisable to the UK, out of date, etc. But the students did not seem to notice the inherent contradiction in their work until it was pointed out to them. The weaker students chose either to ignore the requirement altogether or confined themselves to general platitudes that did not involve reflection. However, some students demonstrated a considerable reflective element to their work in their discussion of the sources, and in the follow up discussions about the module, many of the students while recognising their weakness in this area, suggested spontaneously that this was something
that they needed to improve in order to research and write their dissertations in their final year.

At Masters level, we have always followed the embedded strategy in teaching validity, reliability and generalization. Reflection on validity, reliability and generalization has always been practised and assessed through the dissertation and indeed in course work for other modules, as a critical component of Master’s level learning. The problem is where on the course to teach it. Arguably it falls to the research methods teaching team and in the past we have taught it when thinking about research strategies, when discussing case studies as a research method, and in the session on evaluating secondary research. We also teach it in critical reading but still wonder if this is sufficient? From our experience it is the concept of generalization which causes the most confusion, but that may not be surprising considering the disparate views on generalization that are held by the academic community.

4. Conclusion

In this paper we have highlighted some of the issues surrounding how to assess the rigour of research, specifically its reliability and validity and where generalization is appropriate. Four categories have been identified from the research methods literature as an aid to untangling these somewhat abstract concepts and the different ways in which they are treated in the literature. There is little unambiguous practical advice for student researchers and this adds to their confusion.

Based upon the literature we have reviewed, our experience as research methods teachers and our identification of this lack of explicit guidance, we have described three different approaches used in our teaching to encourage student thinking about validity, reliability and generalization. Business students need to recognise these issues both in the research they read about and use and the research they themselves undertake. Deciding whether 'my research is any good?' is a core skill that has to be taught, practised and assessed. This paper contributes by suggesting teaching methods for encouraging business students to read more critically and reflectively and thus to become better researchers.

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Assessment and Evaluation in Higher Education, 28,2, pp147-164
Thomas, JV (2003) ‘Are the taken for-granted skills that underpin the teaching of research methods and methodology largely absent in the undergraduate population?’ in Remenyi, D and Brown, A (eds) Proceedings of the Second European Conference on Research Methodology for Business and Management Studies, Reading 20-21 March 2003
Multi-perspective Management Research: Fusion or Confusion?

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Abstract: In our most recent project on managerial work, we are considering ways of bringing together the findings derived from quantitative and qualitative evidence. Since 1997 we have carried out extensive longitudinal surveys of a panel of 5000 managers, which we have sought to enrich with a series of some 50 intensive interviews conducted in 2003-2004. The purpose of this paper is to share with colleagues our approach to reconciling the differing paradigms of values, attitudes, needs and expectations, which some continue to argue may be incommensurable.

Keywords: management research, multi-perspective, incommensurability, quantitative, qualitative

1. Introduction

In the recent past, there has been considerable debate about the form and nature of management research. While some see management research as a ‘design science’ (van Aken, 2004) where concerns have been raised about management research having a ‘serious utilization problem’ because of its perceived low level of relevance to its user community and needing to result in more ‘field tested and grounded technological rules’, other management researchers would regard this either as heresy or a perspective on management research with which they would not wish to engage. A further example of the diversity of management research in the UK is that in the 2001 Research Assessment Exercise, a total of 1,582 separate journal titles were included in the RAE submissions of the 100 or so ‘units of assessment’ in the Business and Management field (Geary, et al, 2004). The purpose of this part of the paper is to share our perspectives on management research derived from our fieldwork and investigations specifically into managerial work. We define management research as a process for the production of knowledge that is useful in the task of managing, where knowledge is justified belief. Clearly, there are many lenses from mainstream neoclassical economics to feminist critique that we could use to bring into focus our interest in managerial work. The methods we could legitimately use could vary from large-scale surveys and their attendant statistical techniques where some statistical zealots would argue that the ‘data speak for themselves’ (Lindley, 2004) to participant observation, or to critical ethnography or to discourse analyse of various organisational ‘texts’.

Additionally, there are many directions from positivism to radical feminism from which to shine light to illuminate the subject matter. The discussions here centre on our decisions about which approaches to choose to study the field and, perhaps, more important on the nature of the relationships between different frameworks for analysis and their embedded tools and techniques. For example, if our objective is to develop a ‘rich picture’ of the changing nature of managerial work, is it possible to conduct analysis using different theoretical frameworks and then to integrate the outcomes of the parallel studies to obtain interpretations and understandings that could not be generated by the use of one disciplinary framework alone? Or does the adoption of different frameworks and different perspectives generate understandings that are incommensurable? Or does it indicate that our attempt to produce an integrated understanding is naive and that there can be no convergence to one understanding in a world that consists of multiple and usually conflicting understandings which are conditioned by the position of different observers and participants in society? If we decide to shine the light from one direction then we might illuminate one face of our subject very clearly and only create one set of shadows but if we illuminate our subject from multiple directions we can see that our subject does not have a single face, it has multiple faces and we also create a very complex pattern of shadows.
In our work on the changing nature of managerial work, our intention is to create such a rich picture by attempting to 'light' our subjects in a more complex way. All photographers will tell you that flooding a subject with light will reduce the dimensionality of your subject in which the loss of shadow, texture and relief turns a three dimensional, complex image into a flat image where the nuances of that image and its interest are lost. Our hope is that by ‘lighting our subject’ in a more complex way we can develop a better understanding of the darkness, the light and the intervening shades. Again, a good photographer will tell you that taking the photograph is a technical and an easy job but arranging the lighting to reveal the subject is where the art comes into the equation. It is also very difficult to make the human subject of a photograph look natural when you are asking them to adopt a pose that they would not normally adopt and you are sticking a camera into their face.

Our desire to create new knowledge about managerial work is made more interesting by the fact that the two principal researchers have their origins in radically different approaches to the conduct of research. One has a strong background in managerial research, which is based on realism, empiricism and the collection and analysis of large volumes of hard data. To extend our analogy, this research will admit that he may have been guilty of flooding his subject with some intense lighting that may possibly have obscured more than it illuminated. Essentially, this floodlighting may have turned what is a complex, three dimensional image into a rather flat image but perhaps that is a problem which is symptomatic of a decision to adopt a reductionist approach. The other researcher eschews this approach for one based far more on qualitative evidence from constructivist stances: this will form the basis of an accompanying paper.

This part of the paper is divided into four main sections. In the first section, we outline our research field (managerial work), our prior research and our work in progress. In the second section, we outline our research objectives as a means of framing the research issues (ontological, epistemological and methodological) we have had to confront. In the third sections, the research stance of one of the principal researchers is outlined.

2. Managerial work and why we are interested in it

The driver to our research is that there is relatively little new research being conducted into the changing nature of managerial work and managers’ experiences of changing patterns and structure of work organisation. While there is research into the subject, we find much of it is dated, lacks academic rigour and is not relevant to sustainable practice. Recent work that is relevant includes that by Legge (1995); Noon and Blyton (1997) and Burchell et al (1999), who identify the contemporary tensions and realities of work as becoming intensified, extensified and less secure. These findings are confirmed by our ‘Quality of Working Life Surveys’ (Worrall and Cooper, 1997-2001). However, the base of this research was a highly empirical, realist view of the world and focused on producing statistical models that would explain, for example, the different effects of organisation change on different groups of managers. The empirical approach has implicit within it the view that all truth claims are capable of objective verification or falsification and that there is, essentially, only one truth.

Our early approach also contains some fundamental assumptions about observer neutrality, about the reliability and validity of the questionnaire items used and the ontological basis of some of the core constructs (such as organisational identification, commitment, motivation and loyalty) that either underpinned or emerged from the research. This latter point was clearly made by Johnson and Cassell (2001, p133) who argued that “Phenomena such as motivation, stress and personality cannot refer to real objects, but are merely linguistic constructs which work psychologists take to be real”. Whether, for example, 'stress' exists 'out there' or whether stress has been constructed by 'stressologists' in whose interests it was to discover stress (or, if they could not discover stress 'out there', to 'invent' it so that they could use their positions of privilege as accomplished management researchers to convince us that it existed) is an interesting point and reflects much of what Foucault had to say about the nature of
mental illness. In this case, the voices of 'stressologists' become privileged in that they claim to have access to scientific knowledge which makes their opinions and renditions of what organisational life is really like appear authentic and authoritative. In retrospect, and in this context, the epistemological and ontological basis of our research went unquestioned and both were uncritically taken as given.

The epistemological and methodological basis of our early work was firmly grounded in the work psychology domain. A recent critique of research in work psychology by Johnson and Cassell (2001) raises many of the issues that we are concerned with in that the authors argue that 'work psychology still seems entrenched in the positivist paradigm' (p.126), that the 'epistemological authority' of experimental design is unquestioned and that the whole notion of the 'subject' upon which work psychology is based has been the focus of much debate in other realms of psychology – but not in work psychology. Johnson and Cassell quoted Sparrow (1999) who argued that while many managerial and social science disciplines (had) put themselves through a period of critical analysis' that 'strangely' occupational and organizational psychologists had refrained from putting themselves through such a period of critical analysis. They also quoted the work of Holloway (1991) who argued that the lack of a debate about the status of knowledge within work psychology was problematic in that it identified work psychology with a 'natural science' view of the world.

Johnson and Cassell (2001) went on to comment on the dangers of a lack of 'epistemological reflexivity' within work psychology which had led the field to be characterised by a paucity of theoretical perspectives if not by a theoretical orthodoxy which would ultimately determine what was publishable in certain influential journals. In addition to their concerns about a monoclonal approach to epistemology, Johnson and Cassell also commented on the methodological orthodoxy that characterises the field: they pointed out that quantitative approaches prevailed over qualitative and interpretative approaches. Additionally, they raised fundamental concerns that the epistemological and methodological conformity and orthodoxy of the field actually constrained the types of questions that researchers were prepared to ask and, indeed, we capable of asking.

In a paper which focuses on the need for greater reflexivity in management research, (Johnson and Dubberley, 2003) contrast two distinctive frameworks in which management research is conducted: they contrast a research environment which is characterised by the adoption of a realist ontology and an objectivist epistemology with a research framework that is characterised by both ontological and epistemological subjectivism (these are Q1 and Q3 in the framework we have developed as Figure 1). They argue that the only reflexivity which takes place within Q1 is what they call 'methodological reflexivity' which is 'a localized critique and evaluation of the “technical” aspects of the methodology deployed rather than the underlying metatheoretical assumptions that justify that methodology in the first place' (p1284). Q3, on the other hand, is replete with reflexivity about the epistemological and ontological underpinnings of the research.

The argument for augmenting our statistical analysis with data that captured the lived experiences of managers is that we could gain a richer picture of the changing nature of managerial work. It would also (hopefully) complement our numerical databases with various texts for analysis. One of our objectives was to explore the value of balancing and integrating a realist-objectivist position of 'one concrete, measurable truth' with more subjectivist positions of 'multitudinous intangible, impressionistic, equally valid truths' (Noon and Blyton, 1997, p4). Rather than trying to distil a single reality, we should seek to identify realities of managerial work through the complexity and heterogeneity of managers' experiences. For example, to understand the qualitatively different positions of managers and workers identified in our earlier findings (Worrall and Cooper, 1996-2001) and in the work of others (Noon and Blyton, 1997).

Again, to reflect the work of Johnson and Cassell (2004, p.137) we concur with their views that work psychologists need to be
sceptical (or more reflexive) about ‘how they engage with the world’; about the categories and constructs they often uncritically make use of; and, about the interpretations they make about behaviour in the workplace. We also concur with their view that researchers in organisational analysis need to reflect more on the epistemological and ontological bases of their work. Like Johnson and Cassell, we would argue that a more pluralistic approach to organisational analysis might not necessarily allow us to provide better answers but it might help us to ask better questions and provide a more robust basis for subsequent research.

3. The development of a research framework

Given that our objective is to contribute substantially new understandings of managerial work by painting a rich picture of it, our prime task has been to develop a pluralistic research strategy that would allow us to achieve this objective. Particularly given the differing views of the principal researchers, we argue that it was important to decide early on where the project sits within an ontological-epistemological framework (see Figure 1).

EPISTEMOLOGIES

<table>
<thead>
<tr>
<th>Simplified ways of ‘knowing’</th>
<th>Complex ways of ‘knowing’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single ‘truths’</strong></td>
<td></td>
</tr>
<tr>
<td>QI A nominal approach is assumed to a) the protocols of a research discipline (using quantified and/or qualified data) and b) the subjects studied</td>
<td>QII The subjects studied are accepted as complex but the tendency is to use, borrow or adapt the protocols of established research disciplines to understand complexity</td>
</tr>
<tr>
<td><strong>Complex ‘truths’</strong></td>
<td></td>
</tr>
<tr>
<td>QIV The differing views of the researchers, research protocols and research subjects are accepted as in QII but the studies focus on synthesizing these into unified perspectives</td>
<td>QIII The multiple realities of the differing views of the researchers and research subjects are accepted and explored on many levels using established research protocols and newly devised methods to make sense of the complexities</td>
</tr>
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</table>

Figure 1: An ontological-epistemological framework for categorizing management research

QI

This might equate to what Kuhn (1962) terms normal science. Here dominant orthodoxies and their theories tend to define what exists and/or how this might be known. It requires very significant change to replace an existing orthodoxy, which it does with a new orthodoxy. Work psychology in the form criticised by Johnson and Cassell (2001) would be located within this quadrant. To reflect the concerns about the ‘relevance’ of management research raised by van Aken (2004) and others (e.g. Tranfield and Starkey, 1998), this quadrant is far more likely to produce knowledge that can be transformed into a technological form and thus be deployed to assist practicing managers.

QII

There is no clear view about how ‘truth’ can be sensed and this precludes us from developing a consensus about what constitutes knowledge. The tendency, however, is to resort to adaptations of dominant orthodoxies and prevailing theories to explain complexity.
QIII
Here there are as many realities as there are knowing subjects but there is no consensus about how the multiple ‘truths’ might be known. Some might argue that this is the domain of the postmodern. It has been severely criticized for its lack of rigour and its inability to produce knowledge that is useful to managers (Hardy and Clegg, 1999). Indeed, the production of knowledge that is useful to managers might seem to be antithetical to postmodern management researchers who often seem to equate management with command, control, oppression and exploitation. In this quadrant, reality is considered to be socially constructed.

QIV
QIV has provided us with the context and challenge for our research. While there are multiple realities, the aim is for a defined consensus about what constitutes knowledge and what constitutes an appropriate process for the production of valid and reliable knowledge. An example might help to provide an insight into some of the issues of adopting a QIV approach. A researcher seeking to explain recruitment and retention in an organisation could adopt a number of approaches. If the researcher uses an economics based framework, he/she might ‘see’ the problem in terms of the dynamics of labour market adjustment and collect data about wage differentials, the costs of job search and relocation, and the availability of labour market information. He/she could go on to develop an explanatory framework that looks at how employees or potential recruits seek to maximise their position in the labour market. A psychologist might frame the research using a completely different set of concepts such as commitment to explain retention. The data sets would be very different from that of the economist. The issues we are seeking to confront are how to develop richer understandings of phenomena using a synthesis of trans-disciplinary approaches rather than to assert or justify the use of one approach over another.

In this section of the paper, we have attempted to explain the framework for our research that sees multiple styles of enquiry as valid and useful. We argue that while methodological pluralism is a means of developing a richer picture of our research field of managerial work, we are also aware of the problems of trans-disciplinarity in management research where subject-based and disciplinary hegemonies seek to assert their ascendancy thus defining the political context in which research is conducted. We also argue that in our study of managerial work, the background of the picture we develop will be just as important as the foreground and that we can only understand the foreground by understanding the background and the way that the foreground and the background contextualise each other. Essentially, given our focus on managerial work, the relationship between the research subject and their organisational context is critical and we need to design integrated approaches that will allow us to develop this three dimensional view.

4. The research stance of Researcher 1 (R1)
R1 has a background in general social science research having been educated in geography, economics and statistics. His background has been in applied research in both public policy and management with his doctoral research having focused on the design and development of large scale economic and labour market information systems for the practice of public policy. More recently he has applied his knowledge of economics and employment and his skill sets in data analysis to organisational analysis and to the analysis of the impact of organisational change on managers’ experiences of their working and organisational lives.

His approach is essentially empirical, rational, realist, reductionist and objectivist. Most of his research has been undertaken using a hypothetico-deductive stance usually involving the design of questionnaires and surveys. His approach does not usually involve him having face-to-face contact with the research subject. Given the hypothetico-deductive approach, theory is held to exist prior to the study with the objective of the research normally being seen to test prior assumptions about the relationship between variables. In many cases, emphasis is placed more on ‘finding an answer’ than on developing the right question. Heavy reliance is usually placed...
on prior literature to provide both conceptual and operation definitions.

Where new insights and understandings have been developed this has often been the result of data mining and the complex re-analysis or reclassification of data lending credence to the old maxims about multivariate analysis, which are that they are a means of finding an answer when you do not know what the question is and a means of taking data down to the woodshed to beat a confession out of it. While this approach has yielded many publications, it may have yielded some new insights but largely the publications are more empirical than theoretical and R1 has some sense of frustration that more theory has not developed. Despite the empirical nature of the research and the under-development of theory, the research has had impact on management practice as evidenced by its substantial publication in practitioner journals. This does, however, raise questions about practitioners’ willingness to adopt research that is not grounded in theory. Essentially, much of the research published by R1 exists within QI of figure 1 though in common with many management researchers in the quest for greater Mode 2 relevance (Tranfield and Starkey, 1998) more of his research is now being conducted in QIV.

Recently R1 has become concerned about the limitations of QI research. He has become increasingly concerned about the problem of tautology in QI research. Given that prior theory tells the researcher what data to collect, how to collect it, how to analyse it, how to present the analysis and what hypotheses to test it is not surprising that much of the research is confirmatory. The publication of a recent paper in a psychology journal (Worrall et al., 2004) brought these issues to light. The journal will only publish papers presented in a format ordained by the American Psychological Association. While this framework does facilitate the cross-comparison of results and does require researchers to use research tools that have been ‘proven’ to provide valid and reliable measures of established concepts and constructs, it does, arguably, provide an orthodoxy that might militate against the publication of ‘good quality’ papers that are more innovative and ground-breaking. Here, what constitutes knowledge is ‘policed’ by journal editors and reviewers. Consequently, R1 has a real concern about innovation in research that has been frustrated by the cyclical and recursive nature of QI research. Innovation is more likely to arise if data from different types of research are juxtaposed and if the researcher comes into close contact with the subject of their research as they articulate their experiences in their own words and in their own ways. While reductionism has its place, there is a real problem that the process of reduction reduces the richness of the subject being researched as ‘nuanced’ discursive categories are reduced into rather bland items in a questionnaire.

While R1 is unlikely ever to discard his quantitative orientation completely, he feels it necessary to augment his repertoire of techniques by developing a style in which the strengths of both qualitative and quantitative approaches are used to support the development of richer interpretations and to move the emphasis more from an empirical orientation to an approach more geared to the development of new theory and new insights that are useful to the practice of management. While R1 feels competent at finding answers from data and providing guidance to practicing managers about ‘what to do’ on the basis of his analysis, he feels that approaches geared to the articulation of better questions might be more useful to managers in the long run than approaches that are oriented to the production of the clear but often flawed guidance that managers and the operational users of research often seek. Essentially, R1 has attempted to take what Weick (1999) has termed a ‘reflexive turn’ in his research and has increasingly called into question some of the issues that he considered either to be ‘givens’ or to be not worthy of consideration.

5. Discussion
This paper has attempted to expose some of the issues involved in conducting management research that need to be confronted whether the researcher is well established in his/her field or whether the researcher is just about to start a PhD. If the researcher wishes to make use of a purely instrumental approach to research, there is little doubt in my mind that they should confine their activity to QI of our
model and that they should conduct research in a domain where ontological realism and epistemological objectivism prevails. For, as Johnson and Duberley (2003) point out, the only reflexivity that the researcher will need to undertake here is oriented to technical issues about the selection of methods. However, as management researchers we should continually rethinking the way we think about management research and attempting to develop approaches to research that yield better insights and understandings to the issues that management researchers and the consumers of management research wish to address.

In many cases, practitioner-driven, ‘high user-relevance’ research will require management researchers to address research problems with the objective of producing a set of technological or functional rules that will bring about change or solve problems. In some highly bounded domains, this might be effective but in many arenas – particularly in information systems research, for example - the outcomes of research have led to management actions that have not had the desired results, have been mis-specified and inappropriate and have, in many cases, been completely counterproductive. This, we argue, is because problems and issues have not been properly articulated in the first place and because far too much has been taken for granted in the design of the research. Research design without adequate reflection about some of the underpinning facets of the research is a high risk strategy. There is ample evidence that much research conducted within QI of our model has been naïve and that many researchers within this domain, particularly in the field of work psychology as Johnson and Cassell would suggest, have simply persisted in ploughing an ever deepening furrow with ever more powerful statistical tools and techniques.

While we are aware that we have not raised or discussed many issues that are central to this debate – such as the issue of commensurability between research approaches located in different quadrants of our framework – we are convinced that it is important for management researchers to take less for granted and to become increasingly reflexive about some of the fundamental issues that they persist in taking for granted. We hope that our research into the changing nature of managerial work will help to surface some of these issues and, as a result, help us to achieve our goal of painting a richer, more nuanced picture of managerial work than exists at present.

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Grounded Theory and the ‘And’ in Entrepreneurship Research

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Abstract The paper puts forward the researching of entrepreneurship through the application of grounded theory methodology. Like much business and management research it contends that entrepreneurship research should both embrace the complex processes of enterprise activity and the inherent contextual factors that effect entrepreneurial behaviour. Accounts from other fields of social inquiry have conveyed the worthiness of grounded theory in phenomenological studies. The paper considers grounded theory methodology against the canons of accomplishing worthy social (scientific) inquiry. It addresses grounded theory as a means of emphasising how socially constructed experience is created and given meaning. It concludes that the requisite properties of grounded theory whilst addressing the principles of substantive social inquiry, as in entrepreneurship research, with some contextual and methodological considerations, offers an inductive approach to revealing complex characteristics of enterprise management, and potentially other business areas of inquiry.

Keywords Grounded Theory, Research, Naturalistic, Canons, Entrepreneurship

1. Introduction

We used to think that if we knew one, we knew two, because one and one are two. We are finding that we must learn a great deal more about ‘and’ (Sir Arthur Eddington, Mathematician and Astronomer, 1882-1944, quoted in Rose, 1988).

Researchers are more and more realising that methods within the positivistic paradigm, the ones and the twos, do not necessarily offer appropriate approaches to improved understanding of business and management bounded phenomena. Researching the naturalistic world of enterprise, for example, is not necessarily better understood from attempts at devising laboratory conditions and simulations and assigning numbers to human behaviour.

The paper contributes to the ‘and’ in business and management research by discussing grounded theory methodology. It examples grounded theory in researching entrepreneurship and addresses the methodology against canons of accomplishing worthy social (science) inquiry. From the underlying precepts of validity and reliability, the principles of trustworthiness, generalisability, transferability, consistency, credibility, reproducibility, confirmability and dependability are considered. It emphasises grounded theory as a means of how socially constructed experience is created and given meaning (Denzin and Lincoln, 1994).

Advanced here is a critical appraisal of grounded theory as a contributor to the development of entrepreneurship research, and more generally to business and management inquiry. Some argument on interpretations of methodology (Glaser, 1992; 1998) and method (Strauss and Corbin, 1990; 1998) are highlighted, with subsequent evaluative examination of their research processes.

2. Grounded theory

Championing their argument for the inductive discovery of theory – grounded in a systematic approach to data analysis, sociologists Glaser and Strauss (1967) conveyed a discontent with dominant logico-deductive approaches to research practices of their time. What has emerged from their early and subsequent critiques of established methods has been enlightenment to what can be available to researchers of social phenomena.

Grounded theory beyond sociology has experienced application and discussion (if somewhat limitedly) over subsequent years, [for example: Connell and Lowe, 1997 (tourism and hospitality management); Charmaz, 1990 (medical studies); Douglas, 2003a (research supervision); Henwood and Pidgeon, 1995 (psychology); and lastly, business and management studies]. This latter, pertinent, broad field of academic inquiry has seen grounded theory applied, again...
limitedly [Douglas, 2003b (management research); Douglas, 2004 (entrepreneurship research); Goldkuhl, 2004 (information systems); Locke, 2001 (management research); Lowe, 1995 (innovation), 1998 (business mergers); Partington, 2000 (management action)].

What is pertinent to social research, through grounded theory, is that it seeks to approximate to the context of that being studied, that is (as illustrated in the paper) the enterprise, its actors, their interactions and interrelationships; thus conveying a conceptual understanding of issues that make up their naturalistic worlds (Van Maanen, 1979). Emergent conclusions highlight theoretical explanations for human behaviour, within the bounds of a chosen substantive social investigation. The emergence of meaning from data, but not data themselves, predicates grounded theory as a systematic research approach to understanding a particular social phenomenon. Strauss and Corbin (1990) claim that grounded theory can be used to better understand any chosen phenomenon about which little is yet known. Whilst Glaser (1992) remains an adherent to the principles of their seminal grounded theory (Glaser and Strauss, 1967), his traditionalism irrespective of a distain for the later revisionist approach (Strauss and Corbin, 1990; 1998), assures the qualitative researcher of the values of grounded theory in developing answers to socially purposeful questions of what is happening and why.

Strauss and Corbin are significantly more prescriptive in specifying the steps to be taken by a researcher in open, axial and selective coding, and following their process model (identifying codes as causal conditions, phenomenon, context, intervening conditions, action/inaction strategies, consequences) in developing a theoretical framework. The Glaser adherent allows for the central concept to emerge inferentially from the coding process – reflecting key issues or problems as perceived by the actors being studied. The research initially may be broadly focused in terms of the enterprise’s general management with subsequent emergent constructs becoming central foci of research attention, in grounded theory we do not know, until it emerges (Glaser, 1992:95). Thus, following the Strauss and Corbin approach, the researcher could elect in advance to focus one’s observations, interviews and other data gathering on a particular issue, such as management-employees communication. Coding is then oriented around this topic, with a central concept then sought to represent the interplay of subjects’ and researcher’s perceptions of the nature and dimensions of the elected phenomenon.

As a critique of Strauss and Corbin's (1990, 1998) revisionist methods, emergences of conceptual themes may not legitimately freely surface, then arguably a true ontology would not materialise (Glaser, 1992). In essence the grounded theory researcher is left with a basic choice between Glaser's advocacy of a less specific analytical approach, and Strauss and Corbin's provision of more detailed operational guidelines. The latter offers greater potential assistance to the field researcher, who must nevertheless take particular care to avoid imposing concepts that reflect the researcher's own epistemological predilections, rather than those emerging from interaction with the study site, its participants and subsequent data.

3. Entrepreneurship research and grounded theory

In exampling the previous argument - when seeking understanding to naturalistic enterprise bounded phenomena, detailed predetermination of research foci, beyond generalized parameters, could be contended as inhibiting the true emergence to questions of what and why entrepreneurship focused events have occurred. To research an entrepreneur's leadership style in an attempt to discover his or her business failings (applying the grounded theory method of Strauss and Corbin, 1990) may inhibit the emergence of the true source of an entrepreneur’s limitations. The Glaser (1992) methodology would allow for the flexibility of approach, and freedom of focus, to iteratively develop emergent conceptual categories. Consequently, focusing on an entrepreneur’s leadership style, for example, may not necessarily reveal limitations to an entrepreneur’s decision-making.
Accomplishing entrepreneurship research is arguably more often neither easy nor a straightforward procedure.

…the apparent simplicity of the small business has tripped up a lot of researchers …Much small business research, for example, concentrates on the motivations and actions of just one person, the entrepreneur or owner-manager, but invariably others are involved who also shape the enterprise and its destiny. (Curran and Blackburn, 2001:5)

Entrepreneurship studies have increasingly concentrated on only one actor, the entrepreneur (or owner-manager), as contended by a number of contemporary writers (Curran and Blackburn, 2001; Davidsson and Wiklund, 2000; Davidsson, et al, 2001). Any qualitative research, including that of grounded theory, should not avoid the fact that other actors, both within and without an organisation, will have various measures of influence on the behaviour of the entrepreneur. This realisation will subsequently develop research contributions to enriching findings beyond individual firm level attention.

The aim of developing improved understanding of the construct ‘entrepreneur’, with its attendant social processes, causal explanations and meanings; embeds its antecedents in the premises of ‘symbolic interactionism’, human action is constructed by the actor on the basis of what he notes, interprets, and assesses; and the interlinking of such ongoing action constitutes organizations, institutions, and vast complexes of independent relations. (Blumer, 1969:49).

Any research design therefore must take account of understanding participants’ behaviours from their points of view, their interpretations, their dynamics and properties of interactions, contextualised within their worlds – grounded theory advances such underlying principles of inquiry.

Qualitative research reports are typically rich with detail and insights into participants’ experiences of the world. In studying human relations within an enterprise, the unit of analysis can be highly complex, which is not necessarily the enterprise itself as an entity, nor may it necessarily be individual actors as separate units of analyses, including that of the entrepreneur. Through the application of grounded theory, what typically emerge, as units of analyses are social relationships and patterns of actors’ behaviours. The close proximity of actors within an enterprise and the manifestation of entrepreneurship in practice can generate a complex interplay of social behaviours and human cognitions.

Grounded theory’s worthiness in entrepreneurship inquiry must in its defence consider its epistemology in ‘grounding’ an authentic account, and meaningful interpretation, of entrepreneurship phenomena. Classical rational economic explanations (Kirzner, 1973; Casson, 1982) and psychological-behavioural accounts (McClelland, 1961; Schumpeter, 1934) have been advanced as to why enterprises occur. The underpinning pivotal philosophy of the economic explanation, that of equilibrium and optimum size of the firm being regulated by market forces, has nonetheless been challenged (Penrose, 1995) with assertions that more ‘human’ explanations need to be considered. Thus, psychological-behavioural aspects of entrepreneurship have also been argued as indicators of why businesses fail. Human deficiencies arguments are maintained as being important factors in the downfall of enterprise.

Consideration has been given to this person, the entrepreneur, for more than two centuries, with contemporary scholars having considerably extended research of the concept. The debates have been dominated by attempts to articulate what identifies this special person, the entrepreneur, and makes him or her different from other people generally and other business owners especially. Personality characteristics have been considerably argued (Casson, 1982; Kirzner, 1973; Knight, 1921; McClelland, 1961; Rotter, 1966; Schumpeter, 1934; Shackle, 1966). Such personality explanations have also been contextualised within philosophical arguments focusing on power, bureaucracy and legitimacy (Clegg, 1975; Lukes, 1986; Weber, 1930). However, attempts at the personality explanation
Critiques of various attempts to psychologically and behaviourally explain the phenomenon of entrepreneurship has resulted in a general agreement that a meta-model of entrepreneurship is probably an appropriate means of understanding this complex area of research. Such an approach is somewhat synonymous with an appropriate *modus operandi* of researching and understanding the complexities of the domain of business enterprise and management as a whole – as it ranges from the macro-level socio-economic-political attention to the micro-level activities of the owner-manager-entrepreneur.

A methodological argument may however be put forward that any attempt to gain macro level explanations for entrepreneurial behaviour (as worthy a pursuit as it is) will remain illusive or fabricate a superficial product. Arguably the only true ontological explanation for entrepreneurial behaviour lies at an individualistic level (the entrepreneur and that which affects entrepreneurship activity). The uniqueness of the entrepreneur (Brazeal and Herbert, 1999), however conceptualised, warrants investigation at a micro level of (entrepreneurial) activity. In such instances the qualitative paradigm naturally assumes prominence in its epistemology and methodology - with grounded theory offering an approach that was developed to enhance understanding of socially centred phenomena - entrepreneurship is a human condition.

Grounded theory offers the entrepreneurship researcher appropriate inquiry processes with which to address research issues at the micro-level of entrepreneurial activity. Investigating, in minute detail, the entrepreneur and his or her immediate environment are well suited to the grounded theorist. Grounded theory research is methodologically appropriate for researching both the entrepreneurial domains of economic explanation theories and psychological-cognitive-behavioural perspectives. Setting aside the debate as to which grounded theory method or methodology to follow, both processes support the central tenet of human group life inquiry - from which grounded theory originally emerged (Glaser and Strauss, 1964).

### 4. Discussion

An essential question requiring attention by any researcher is the notion of trustworthiness in interpretation of one’s research data - *How can an inquirer persuade his or her audiences that the research findings of an inquiry are worth paying attention to?* (Lincoln and Guba, 1985:290). A general but enduring view remains to-date of the scientist as someone who rigorously applies experimental methods of inquiry. Controlled experimentation is the underlying practice in the establishing of scientific principles and positivistically derived ontologies. Such methods thus proffer the notion of the Baconian thesis being firmly established and can offer no better practices and philosophical beliefs in the establishing of truth.

Holding such blinkered ‘trust’ thus excludes, say, pure mathematics from being within the purview of scientific practice. Such a constrained belief would therefore preclude the applied scientific practices of, say, the astronomer or geologist. In reality, these science-based practitioners only observe consequences of phenomena and circumstances over which they have had no control. Whilst, for example, the notion of a ‘black-hole’ remains an unobserved theoretical construct, science-based argument appears to give credence to the concept amongst the astronomical research community. It is a contentious statement that scientists work in ways that result in deductively derived at claims of truth established in nature – which can in fact be no more or less than that which they believe to be in existence from their observations. Experimentation may distinguish science from precarious spiritual, religious and metaphysical claims of ways to establish knowledge, but it does not in reality describe fully scientific method.

Having the conviction that science arrives at truth by logical inferences from
empirical observations, and is thus the benchmark underpinning scientific standards of practice and is defended on the premise of induction, and the belief that what has been observed to occur many times is almost certainly to occur again. Therefore, such ontological conclusions may be accepted as a basic fact or even a law on which a fundamental structure of theory may be established and reaffirmed. From it one can deduce a number of practical procedures, such as the testing of theory by ‘predictions’ of the results of future observations, and their subsequent confirmation. The importance of speculative thinking is rightfully acknowledged, as long as it is restrained by adherence to facts. It is at this juncture that the qualitative researcher can countenance his/her approaches in establishing knowledge.

Trustworthiness can therefore under such circumstances be consensually agreed. Naturalistic-based research inquiries cannot realistically be duplicated in researcher controlled (sic) settings. To improve our understanding of the entrepreneur and the world in which he or she operates within can never be other than superficially replicated. To understand the naturalistic world of the entrepreneur requires qualitative research designs, and getting close to the actors being studied (Mintzberg, 1979). Natural scientific experiments, carried out under laboratory controlled conditions, arrive at partial and incomplete knowledge and, like all research endeavours, are not truly scientific, however honestly pursued. Human reasoning for the natural scientist would normally be supported by mathematically-deduction, with unavoidable interpretation of data as a human functioning process. Deductive, or for that matter inductive, ontological explanations are a consequence of human attempts at the approximation of truth at a given period in time. Science is therefore the application of intellectual discipline as one would expect to see applied in any intellectual pursuit of knowledge? The goal of science is to seek consensus of rational opinion. Scientific research is a socially embedded activity. The scientist learns by imitation and experience, and applies conventions that reflect social peer relationships, irrespective of academic discipline.

Thus the serious researcher defends his/her derived at theories and knowledge claims within contemporaries’ social relations, be it the natural scientist or social inquirer. The evolution of scientific methodological canons has developed the scientist’s defence arsenal. The emergence of canons of ontological ‘credibility’ to one’s knowledge claims, and ‘trustworthiness’ of epistemology and methodology, has become significant research tenets. Consequently, in conjunction with credibility and trustworthiness such underpinning canons as the following, have become embedded in the broader research lexicon: generalisability, transferability, consistency, reproducibility, confirmability and dependability.

Nonetheless, when judging qualitative work, the usual canons of ‘good science’...require redefinition in order to fit the realities of qualitative research (Lincoln and Guba, 1985:250). Theory building is not a perfected product [but an] ever-developing entity (Glaser and Strauss, 1967:32). One of the requisite properties of grounded theory is that it be sufficiently general to be applicable to a multitude of diverse situations within the substantive area (Glaser and Strauss, 1967:237). It is not necessary to insist that the product of qualitative inquiry be a theory that will apply to a large number of diverse situations. Naturalistic inquiry is always a matter of degree and so the extent to which researcher reflexivity conditions response from the interviewee and imposes categories on the data creates uniqueness (Patton, 1990). As earlier stated, the readership of grounded theory based entrepreneurship research findings may best be the judge of the generalisability canon.

Inductive theory generation is embedded in explicit explanation of phenomenon, rather than broad generalisations. The explanatory power of grounded theory is to develop predictive ability – to explain what may happen to a business, or an entrepreneur, given incidents that tend towards replicating previous grounded and other interpretivist theories. Naturally, the wider the theoretical sampling frame develops the more embedded (and grounded) the theory is established, and whilst generalisability in the naturalistic world of enterprise requires
circumspection, general theories can emerge from within the qualitative paradigm. Once random samples are established, generalisability is often taken for granted from within the quantitative paradigm. Conversely the qualitative researcher, and therefore the grounded theorist, must carefully consider the particular findings of others and their transferability and generalisability on a more case-for-case basis. The triangulation of qualitative methods of deep levels of inquiry by non-associated researchers focusing on entrepreneurship is capable of developing a 'generally' agreed view – as has consequently occurred with the current multi-dimensional perspectives of the construct ‘entrepreneur’. Thus generalisability does not depend on sampling criteria but on substantive data (Patton, 1990).

As inferred the naturalistic paradigm of 'transferability' depends on the degree of similarity between the original situation and the situation to which it is transferred. The researcher cannot specify the transferability of findings; he or she can only provide sufficient information that can then be used by the reader to determine whether the findings are applicable to the new situation (Lincoln and Guba, 1985) - Stake (1978:6) refers to this as naturalistic generalization, whilst Patton (1990:489) suggests the term extrapolation. Connected to the countenance of grounded theory, case study research holds common associations. The grounded theory style of handling and interpreting data may be incorporated into case studies (Locke, 2001). In the area of organization studies, Post and Andrews (1982) contend the usefulness of applying grounded theory in the creation and analysis of cases. Strauss also supports the link between the two presentational methods, In the grounded theory style of analytical presentation, case studies are constructed not very differently than by most qualitative researchers (Strauss, 1987:218). Thus the manifestation of a grounded theory approach to entrepreneurship inquiry, in the reporting style of a case study, may countenance the transferability canon in such an area of the qualitative paradigm.

Developing the potential strengthening of findings by case study association, the canon of consistency, through grounded theory, also contends that external triangulation (with other methods) can examine the consistency of a grounded theory’s findings. Internal consistency is verifiable through grounded theory’s levels of abstraction and saturation of theoretical constructs. Therefore, consistent with interpretive theoretical meaning and definitions of a situation (Schwandt, 1994:118) entrepreneurship inquiry beyond that of the sole entrepreneur (Curran and Blackburn, 2001) offers accounts and meanings to incidents beyond the two primary interactive individuals (the respondent entrepreneur and the researcher).

The canon of credibility for the naturalistic researcher assumes the presence of multiple realities and attempts to represent these multiple realities adequately. Credibility depends less on sample size than on the richness of the information gathered and on the analytical abilities of the researcher. Credibility can be enhanced through triangulation of data. Patton (1990) identifies four types of triangulation: methods triangulation; data triangulation; triangulation through multiple analysts; and theory triangulation. The progressive move towards saturation of data sources from wider, but associated actors’ perspectives, beyond that of the entrepreneur, is an example of grounded theory’s processes of establishing ontological emergence of theoretical concepts beyond singular perceptions of phenomena (namely those conveyed by the entrepreneur alone). Thus, associated actors’ perspectives of a phenomenon or incident knowledgeable to others, as well as the entrepreneur, offers the grounded theory researcher multiple perspectives and multi-faceted personal accounts. Employees within, say, a small enterprise offers the opportunity for multiple data sources over and above that of the principal actor (the entrepreneur).

The reproducibility canon is usually interpreted as meaning a particular study can bear replication of research processes. Replication of process and matched results gives credibility to original research findings. Reproducing socially constructed entrepreneurship phenomena is arguably problematic, if not impossible. Whilst the natural scientist would contend that reproducibility of processes are possible (to some degree) within
controlled laboratory conditions, thus verifying credibility; it may be countered by the social scientist that reproducibility, due to the complexity of human variables, is not (ever) wholly, or even in part to any meaningful extent; attainable. However, reproducibility of entrepreneurship phenomena is unfeasible as the researcher cannot replicate original conditions or control all the possible variables of human group life under study. Researching in the naturalistic world of enterprise requires another perspective on the notion of reproducibility.

Researching within the qualitative research paradigm relies on interpretations and is admittedly subjectively value-bound. In the world of quantitative research, subjectivity arguably leads to results that are both unreliable and invalid. However, one may call into question the true objectivity of statistical measures and, indeed, the possibility of ever attaining pure objectivity (Lincoln and Guba, 1985). Patton (1990) believes that the terms objectivity and subjectivity have turned into ideological ammunition in the ‘paradigms debate’. He suggests avoiding the use of either word and to stay out of pointless debates about subjectivity versus objectivity. Alternatively, he strives for empathic neutrality (Patton, 1990:55). While admitting that these two words appear to be contradictory, Patton points out that empathy, is a stance toward the people one encounters, while neutrality is a stance toward the findings (Patton, 1990:58).

A researcher who is neutral tries to be non-judgmental, and strives to report what is found in an unbiased way. Lincoln and Guba (1985) choose to speak of the confirmability of the research. Grounded theory based entrepreneurship research is a stance toward the informants-participants and a neutrality structured methodology, with confirmability of theory being embedded in adherence to grounded theory’s established processes of inquiry. Essentially, Lincoln and Guba (1985) refer to the degree to which a researcher can demonstrate the neutrality of the researcher’s interpretations, through a confirmability audit (Lincoln and Guba, 1985:320). This means the entrepreneurship researcher should be able to provide an audit trail of his/her knowledge claims back to the raw data (interview notes, tape recordings, observation notes, etc.) and: analysis notes; reconstruction and synthesis methods; process notes; personal notes and memoranda; and preliminary developmental ephemera. This epistemological process embeds the confirmability of knowledge claims and methodological processes. It can ideally offer other interpreters the opportunity to review previously gathered data and their interpretive analyses.

A quality measure that helps to substantiate the canon of dependability and safeguards against data coming under too subjective interpretive biases, especially by the single researcher, is the evaluation of data by multiple interpreters – thus giving some dependability on range of perspectives. Interpretation by a team across a variety of dimensions (for example; age, gender, discipline, pre-knowledge, etc.) can guard against singular biases of interpretation and give a triangulation of data perspectives and analyses. To retest the data both with the same and different team members at a later date can also be used to substantiate the dependability of earlier interpretations of data. Capturing data for future re-appraisal is a common practice by the grounded theorist and is usual in entrepreneurship research – especially where the researcher often has only ‘one chance’ with a respondent.

In keeping with the original guiding principles of grounded theory, the generating of a substantive theory of a phenomenon, with the assumption of similar conditions encountered, do offer entrepreneurship researchers credible reproducibility potential. Distinctive characteristics from original findings should not be regarded as undermining the uniqueness of original phenomenon’s interpretations - but enriching and deepening understanding of similar incidents. Socially embedded inquiry will always have uniqueness. However, wide discrepancies can often be explained through the re-examination of data. It is from the accumulation of replication and interpretation that grounded theory can develop entrepreneurship understanding from localised substantive theories to the maturity of formal theories, and potentially general theories, that offer interpretations.
across wider situational and theoretical understanding.

Concluding almost where we began with grounded theory's trustworthiness and the canons of scientific inquiry, an important point needs to be addressed. The debate as to the appropriateness of the revisionist approach to grounded theory as propounded by Strauss and Corbin (1990) against the traditionalist approach (Glaser and Strauss, 1967) does continue to beleaguer any agreed grounded theory approach. For the new grounded theorist the revisionist approach to theory building is well delineated and overtly applicable to entrepreneurial researching. The traditionalist approach is iterative and requires creativity that may possibly be more likely to be found within the established and developed abilities of the well-practised qualitative researcher. Though such a person may him/her-self have developed biases that could stymie the necessary open 'no-baggage' approach that is a useful starting point in traditionalist grounded theory?

The traditionalist approach, due to an abandonment of a priori research questions, produces long periods of ambiguity and uncertainty. However, the abandonment of preconceived conditions within the unit of analysis (be it the entrepreneur or the enterprise) does aid in understanding particular individually centred events within their naturalistic 'idiographic' settings. From an ethnographic analytical perspective, the idiographic standpoint will encourage the development of theory that is emergent from that of the 'informant', or perhaps better considered as the 'participant' ('emic'). This somewhat non-prescriptive process gives strong argument for the emergence of theory from a circumstance that has had minimal conditioning from the researcher (Glaser, 1992). Conversely, the prescriptive principles of the revisionist method (Strauss and Corbin, 1990) propose a more controlled environmental context by the researcher, with consequent researcher centrality ('etic'). Whilst it can be argued that the traditionalist methodology allows for iterative reflection and working with data until they become saturated (Glaser and Strauss, 1967) and cease to reveal anything fresh, and conversely the revisionist method that takes the researcher along a linear path to a more arguably processual closure - both options necessitate detailed researcher interaction with data. Therefore, whilst it can be argued that gathered data could be different through choice of approach in developing entrepreneurship theory, the researcher would be countenanced (as a defence of research validity and reliability) in establishing to the readership one's elected research approach.

5. Conclusion

The paper's initial starting point was the contention that grounded theory, within the qualitative paradigm, seeks to compliment existing entrepreneurship understanding through the application of an recognised alternative and established research approach. The scope of grounded theory needs to be rationalised as part of that contention. Where existing theory is well developed, then arguably, deductive methods could be more useful in developing entrepreneurship understanding, especially at a macro economic level. Conversely, this discussion has countenanced in-depth micro level studies of entrepreneurship activity through the meticulousness of grounded theory. Thus offering a reporting style that conveys contextual depth of understanding that would not be attainable, nor even expected, from within the quantitative paradigm

The argument put forward for the support of entrepreneurship inquiry, through grounded theory, contends that micro level concerns such as complexity, contextuality, opaqueness, interdependencies, time-frames and other unique variables, necessitates (and gravitates towards) applying research methods that elucidate interpretive understanding as to what is happening and why. Thus grounded theory particularly orientates towards eliciting theoretical-conceptualisations of processes of social interactivity. Such phenomena are not so well disposed to improved understanding through the logic of mathematics.

*The mathematics is not there
till we put it there* (Sir Arthur Eddington, 1939)
References


Using a Multimethod Approach to Research Enterprise Systems Implementations

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Abstract: This paper explores the use of multimethod research design. With the development and legitimacy of both qualitative and quantitative research, the combination of both types is expanding. In this paper we present how we have explored the multimethod approach by using an example domain in a step-by-step manner, learning about the strengths and weaknesses of this approach. The context is a doctoral research project whose aim is to study critical success factors for Enterprise Resource Planning (ERP) implementation projects.

Keywords: Enterprise Resource Planning, critical success factors, implementation phases, ERP implementation projects

1. Introduction

With the development and legitimacy of both qualitative and quantitative research, the combination of both types of research is expanding (Tashakkori and Teddlie 2003). Lately, the alternative of combining methods – the multimethod approach - has emerged in different research areas as a way of improving research process and findings. “Multiple methods are used in a research program when a series of projects are interrelated within a broad topic and designed to solve an overall research problem” (Morse 2003, p. 196).

The main advantages of multimethod work are (Tashakkori and Teddlie 1998): triangulation – seeking to validate data and results by combining a range of data sources, methods, or observers; creativity – discovering fresh or paradoxical factors that stimulate further work; and expansion – widening the scope of the study to take in contextual aspects of the situation.

Qualitative and quantitative methods should not be viewed as polar opposites (Van Maanen 1983) since their combination introduces both testability and context into the research (Kaplan and Duchon 1988). Collecting different kinds of data by different methods from different sources provides a wider range of coverage that may result in a fuller picture of the unit under study than would have been achieved otherwise (Bonoma 1985).

Based in a survey of the top Information Systems (IS) journals, Mingers (2001b) mentions that the average of multimethod studies across journals varies rather randomly over time at around the 20%. Because the multimethod design approach is relatively new, there is a lack of research on the topic, and most especially there is a shortage of examples of its applications (Mingers 2001a). In this paper we present how we have explored the multimethod approach by using an example domain in a step-by-step manner, learning about the strengths and weaknesses of this approach. The context is a doctoral research project whose aim is to study critical success factors for Enterprise Resource Planning (ERP) implementation projects. This paper is structured as follows. First, we present the background on the multimethod approach. Then, we describe in detail our example by explaining the research strategy and the research methodology. Finally, we draw some considerations and further work.

2. Background on multimethod research design

In the related literature it is common to find the terms ‘mixed method’ design, ‘multimethod’ design and ‘multiple method’ design that are very often used interchangeably. However, it is important to distinguish these terms. Tashakkori and Teddlie (2003, p. 11) define multiple method as “research in which more than one method or more than one worldview is used”. They define at least three broad categories of these multiple methods: multimethod research, mixed method research, and mixed model research. From the analysis of Tashakkori and Teddlie (2003) we evidence that the distinction among these terms is related to the research stage of the study (definition}
of research questions, research methods, data collection and analysis, and the inference process) where the mix of methods is used. Morse (2003, p. 190) provides the following definitions for multimethod and mixed method designs:

- **Mixed methods design** – this is the incorporation of various qualitative and quantitative strategies within a single project that may have either a qualitative or quantitative theoretical drive. The “imported” strategies are supplemental to the major or core method and serve to enlighten or provide clues that are followed up within the core method.

- **Multimethod design** – this is the conduct of two or more research methods, each conducted rigorously and complete in itself, in one project. The results are then triangulated to form a complete whole.

Morse (2003) uses the term research project to refer to a research study focusing in one research question, while research program refers to a cluster of research projects. According to Morse (2003), the major difference between multimethod and mixed method design is that in multimethod design all projects are complete in themselves. Tashakkori and Teddlie (2003) propose the term mixed model research to represent the mixed combination of methods in many or all the stages of the study. Regarding multimethod design, Morse (2003) describes three main principles:

- Principle 1: identify the theoretical drive of the research project.
- Principle 2: develop overt awareness of the dominance of each project.
- Principle 3: respect methodological integrity.

The first principle analyses the importance of the theoretical drive definition. The theoretical drive may be inductive (for discovery) or deductive (for testing). The second principle is related with the awareness of working inductively or deductively at any given time which will ensure that the assumption of each method is not violated. Morse (2003) defines two types of multimethod designs that may be applied: simultaneous and sequential designs. Using a categorization of qualitative and quantitative methods and the two main types of multimethod design, Morse (2003) proposes eight combinations of multimethod designs (see table 1). According to Morse’s naming convention indicates, awareness of the theoretical drive by using uppercase/lowercase notations indicating that the major methods (a plus [+] sign indicating that the methods are used simultaneously or an arrow [⇒] indicating directions), with uppercase representing dominance and lowercase representing the supplemental projects.

| Table 1: Characteristics of multimethod designs, source: Morse (2003). |
|----------------------|-----------------------|
| **Design type**      | **Combination**        |
| Simultaneous         | QUAL+qual indicates a qualitatively-driven, qualitative simultaneous design. |
|                      | QUAN+quan indicates a quantitatively-driven, quantitative simultaneous design. |
|                      | QUAL+quan indicates a qualitatively-driven, qualitative and quantitative simultaneous design. |
|                      | QUAN+qual indicates a quantitatively-driven, quantitative and qualitative simultaneous design. |
| Sequential           | QUAL⇒qual indicates a qualitative-driven project followed by a second qualitative project. |
|                      | QUAN⇒quan indicates a quantitative-driven project followed by a second quantitative project. |
|                      | QUAL⇒quan indicates a qualitative-driven project followed by a second quantitative project. |
|                      | QUAN⇒quan indicates a quantitative–driven project followed by a second qualitative project. |

Morse (2003) mentions that research projects may have complex designs containing combinations of the above (table 1), depending on the scope and complexity of the research program. The third principle emphasizes the need to keep the integrity of each research method. “It is important not to violate the assumptions, sampling (appropriateness and adequacy of data), and so forth” (Morse 2003, p. 199). Hunter and Brewer (2003, p. 578) mention that the multimethod approach “is a strategy for overcoming each method’s weaknesses and limitations by deliberately combining different types of methods within the same investigations”. Mingers (2001a) proposes a framework for mapping the research methods in a multimethod design approach. This framework is based in two important features for multimethod research: its multidimensionality and the different types of activity that need to be undertaken within the phases of research.
“By combining these two factors, a grid is produced that can be used to map the characteristics of different research methods to help in linking them together” (Mingers and Brocklesby 1997). Regarding multidimensionality and based on Habermas’s theory, Mingers (2001a) says that we can categorize research methods in terms of their relationship to the three worlds – the material world, the social world, and the personal world. The definitions of these worlds are included in table 2.

**Table 2**: Three worlds relevant to research methods proposed by Mingers (2001).

<table>
<thead>
<tr>
<th>World</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Material World</td>
<td>It is outside and independent of human beings. It existed before us and would exist whether or not we did. We can shape it through actions, but are subject to constraints. Our relationship to this world is one of observation, but such observations are always theory and subject dependent. We can characterize this world as objective in the sense that it is independent of the observer, although clearly our observations and descriptions of it are not.</td>
</tr>
<tr>
<td>The Personal World</td>
<td>It is the world of our own individual thoughts, emotions, experiences, and belief. We do not observe it, but experience it. This world is subjective in that it is generated by, and only accessible to, the individual subject. We can aim to express our subjectivity to others and, in turn, appreciate theirs.</td>
</tr>
<tr>
<td>The Social World</td>
<td>It is the world that we share and participate in. Our relation to it is one of intersubjectivity because it is, on the one hand, a human construction, and on the other, it goes beyond and preexists any particular individual. It consists of a complex multilayering of language, meaning, social practices, rules, and resources that both enables and constraints our actions and is reproduced through them. One of its primary dimensions is that of power.</td>
</tr>
</tbody>
</table>

For the second dimension of multimethod research framework – the phases of the research process, Mingers (2001a, p. 245) identifies four phases:

- **Appreciation** of the research situation as experienced by the researchers involved, expressed by any actors in the situation, and prior literature and theories. This will involve the identification of the experience or phenomena to be explained, initial conceptualization and design of the study, and the production of basic data using methods such as observation, interviews, experiments, surveys, or qualitative approaches.

- **Analysis of the data** produced so as to understand the history that has generated it, and the particular structure of relations and constraints that maintain it. This will involve analysis methods appropriate to the methodology of the study and the data produced in the first stage.

- **Assessment** of the postulated explanation(s) in terms of other predicted effects, alternative possible explanations, and, within action research, consideration of ways in which the situation could be other than it is. The assessment phase also involves interpretation of the results, and inherence to other situations.

- **Action to report** on and disseminate the research results and, if necessary or desired, to bring about change to the situation.

Mingers (2001a, p. 246) emphasizes that these activities are not seen as discrete stages that are enacted one by one, with their relative importance differing as the project progresses. He also states that different studies will place their emphasis at some stages rather than others. Next we describe and example of a research program we carried out using the multimethod approach.

### 3. Conceptual framework

This section shows the doctoral research proposal related with ERP systems implementation phase, namely with the Critical Success Factors (CSF) associated to ERP implementation projects. The conceptual program framework diagram is represented in figure 1. The research area was ERP systems and aspects such as: overview, importance, project management, issues and ERP life-cycle. The research context was the ERP implementation phase, and its success or failure. The support to ERP implementation through CSF and related
Key Performance Indicators (KPI) have been studied. We have also attempted to understand the management of these CSF and KPI.

Figure 1: Conceptual framework.

4. Research strategy
In this section we outline the doctoral research proposal. First, we define the research questions. Second, we present the goals to be achieved. The motivation aspects are then presented. Finally, we present the multimethod research framework

4.1 Research questions
The general research questions of the doctoral research study were the following:
- What are the CSF for an ERP implementation project?
- What is the relevance of each CSF along the typical implementation project stages?
- How these CSF are managed and influence ERP implementation projects?
- What are the KPI related to the above CSF?

4.2 Research goals
The main research purpose of this study was to get an understanding of project management practices in the realm of ERP implementations by focusing on the analysis of CSF and the generation of KPI as well as their contribution to monitoring the implementation phase, in order to help managers in the task of project management. The definition of goals was done accordingly to the decision-making structure presented in figure 1. We attempted to achieve the following goals:
- **Definition of CSF needed for a successful ERP implementation.**
  All the studies related with CSF and ERP implementations are based on case studies so, first, we have integrated these CSF in a unique unified model.
- **Understand how CSF are managed in ERP implementations.**
- **Generation of a set of KPI to help with the monitoring of CSF.**
  Usually, once CSF are established, each process and department is encouraged to identify indicators that can be used to measure its contribution. KPI can be used to monitor the ERP implementations and, help in CSF analysis, thus helping managers in the decision making process related to the ERP implementation phase (see figure 1).

4.3 Research paradigm
Following the first principle of Morse (2003) we defined the theoretical drive of our research. In order to develop this doctoral research project we decided to
adopt the interpretive research paradigm. Interpretive research assumes that “our knowledge of reality is gained only through social constructions such as languages, consciousness, shared meanings, documents, tools, and other artifacts” (Klein and Myers 1999, p. 69). Interpretive research does not predefine dependent or independent variables and it attempts to explain phenomena through the meanings that people assign to them (Orlikowski and Baroudi 1991). According to Walsham (1993) the purpose of the interpretive approach in IS is to produce an understanding of the context of IS and the process whereby IS influences and is influenced by the context. Interpretive research approach gives the researcher greater scope to address issues of influence and impact, and to ask questions such as “why” and “how” particular technological trajectories are created (Orlikowski and Baroudi 1991). Aladwani (2001, p. 267) states that “past ERP implementation research may be described as factor research, which involves identifying the factors or variables that are critical for implementing ERP successfully. Although factor research is valuable for advancing our understanding of ERP implementation success, it adopts a static view, which limits its adequacy in explaining the dynamics of the implementation process”. Aladwani (2001) and Robey et al. (2002) suggest a process research approach or a combination of factor and process approaches, in order to improve research in ERP topics. Using a process approach, ERP implementation may be conceived as sequences of discrete events that lead to outcomes of particular interest. Another perspective is that an ERP implementation may be conceived as a sequence of stages, in which related activities occur (Robey et al. 2002). Our aim is to use both factor and process approaches in order to study CSF for ERP implementation projects.

4.4 Research design

We agree with Robey (1996, p. 406) when he says that “theoretical foundations for research and specific research methods are justified by research aims, or purposes. They should not be chosen because they conform to a dominant paradigm or because the researcher believes in their intrinsic value. Rather theory and method are justified on pragmatic grounds as appropriate tools for accomplishing research aims”. Therefore, in order to accomplish the research aims of this research, we propose a research framework (see figure 2) that combines various research methods, both quantitative and qualitative, with predominance of qualitative ones. This type of research is defined as “multimethod” research by Mingers (2001). There is a move in the IS field toward combining qualitative and quantitative methods (Mingers 2001). These methods need not to be viewed as polar opposites (Van Maanen 1983) since their combination introduces both testability and context into the research (Kaplan and Duchon 1988). Collecting different kinds of data by different methods from different sources provides a wider range of coverage that may result in a fuller picture of the unit under study than would have been achieved otherwise (Bonoma 1985). The use of multiple methods increases the robustness of results because findings can be strengthened through triangulation – the cross-validation achieved when different kinds and sources of data converge and are found congruent (Kaplan and Duchon 1988).

The doctoral research framework (see figure 2) presents the different phases of the research study, and with the different research methods mapped and linked in each phase. Considering the research questions and the research context, we asked ourselves which research methods could be useful to address those questions. These are the research methods that we believe are appropriate for this research study. At the beginning we accepted that some research methods could change accordingly to the outcomes that we would obtain in each research phase.
Next, we describe each research phase that we carried out using the multimethod approach.

4.5 Multimethod design followed

In order to accomplish the research aims of this research, we proposed a multimethod research framework (see table 3) that combined various research methods, both quantitative and qualitative, with predominance of qualitative ones. The use of multiple methods increases the robustness of results because findings can be strengthened through triangulation – the cross-validation achieved when different kinds and sources of data converge and are found congruent (Kaplan and Duchon 1988). Taking into account the research questions and the research context, we asked ourselves which research methods could be useful to address those questions. These are the research methods that we believe are appropriate for this research study. At the beginning we accepted that some research methods could change accordingly to the outcomes that we would obtain in each research phase. Mainly, our approach follows the QUAL→qual and the QUAL→quan design type according to Morse (2003) typology. We would like to emphasize that our model is quite complex with some combinations proposed by Morse (2003). Next, we briefly describe each research phase and the respective research methods used.
Table 3: Multimethod research framework proposal.

<table>
<thead>
<tr>
<th>Research Phase</th>
<th>Type</th>
<th>Research methods used</th>
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<td>Literature review</td>
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<td>Coding procedure</td>
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<td>Goals/questions/metrics</td>
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<td>Stakeholder analysis</td>
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<td>ERP implementation projects</td>
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<td>CSF identification</td>
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<td>CSF relevance</td>
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<td>CSF management</td>
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<td>Key performance indicators</td>
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<tr>
<td>Confirmatory case study</td>
<td>QUAL→quan</td>
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4.5.1 ERP implementation projects

The first phase of this research framework consisted in an extensive literature review on the ERP topic. Based on this literature review, we provided an annotated bibliography of the ERP publications published in the main Information Systems conferences and journals with which we reviewed the state of art in this area (Esteves and Pastor 2001). The surveyed publications were categorized through a typical ERP lifecycle. Furthermore, the survey included proposed topics for further research in each phase. One of these topics was CSF for ERP implementation projects.

4.5.2 CSF identification

The purpose of this phase was to identify and define the CSF for ERP implementation projects. We developed a unified model of CSF based on prior research with partial CSF lists through the application of the Open Coding procedure from the Grounded Theory method (Glaser and Strauss 1967). The number of CSF is large but they are divided in four perspectives: strategic and tactical perspectives, and organizational and technological perspectives. We also compared the CSF for ERP implementations with CSF for other IS implementation projects. Finally, we carried out specific research to clarify the project champion role CSF since during the literature review we found some misunderstandings regarding this figure, for which we used the web survey method to collect the data. This data was analyzed through qualitative procedures and by using some statistical analysis. The findings show that the project champion is associated to the project sponsor role and that project sponsor and project manager are both identified as CSF for ERP implementation projects. This clarification was used to refine our prior CSF unified model.

4.5.3 CSF relevance

The purpose of this phase was to analyze the CSF relevance along the typical ERP implementation phases using the Process Quality Management (PQM) method. The PQM developed by IBM is “designed to assist the management team reach consensus on the most critical business activities, i.e. those whose performance will have the biggest impact on the success or failure of the enterprise” (Ward 1990, p. 105). The PQM method uses the concept of CSF (Rockart 1979) to encourage management teams to focus their attention on the critical issues of the business, and then to base the IT strategy on these. This is a novel way of studying CSF relevance since until now researchers have used case studies or surveys. By applying PQM and using the ASAP implementation methodology as a reference for the SAP implementation processes, we defined the CSF relevance for each CSF along the SAP implementation phases. Then, we contacted two professional experts on SAP implementations and we asked them to verify the relationships between CSF and SAP implementation processes that we had previously established. We asked them to provide an argumentation for each
change. Overall, their opinion was that our analysis was very accurate and rigorous.

Next, we extrapolated our findings to other ERP studies by comparing our relevance schema with others proposed by other colleagues. One of the limitations of PQM is that the process structure of the PQM is too simple since it only provides one level of process analysis. Since the structure of ERP implementation processes implies project process structures that are more complex, we proposed the improvement of the PQM analysis section to provide more depth to these complex project structures. We then extended the standard PQM method, with a new criticality indicator for complex implementation project process structures. This criticality indicator was used to define and analyze the most critical SAP implementation processes. Finally, we analyze the relevance of knowledge types along the SAP implementation phases. Our research model helped to provide some exploratory insights on knowledge types needed for the management of CSF and also to analyze the relevance of these knowledge types along the SAP implementation phases.

4.5.4 CSF management

To study the management of CSF we opted for using the case study method. A case study is “an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident and it relies on multiple sources of evidence” (Yin 1994, p. 13). We conducted a pilot case study of an ERP implementation in a Portuguese Small and Medium enterprise (SME). This SME was selected because we detected a lack of studies on ERP implementations on SME, and the geographic location. Since Portugal is the country of the doctoral student, the language spoken and the knowledge of Portuguese society were an advantage, and the SME is located near the home residence which helped to keep contact with interviewers. Finally, the SME managers were open to provide access to all the project documentation. All these reasons are point out by Yin (1994) as valid reason to select a pilot case study.

The pilot case study helped to validate the research framework and the preparation of the in-depth case study (see validation phase below). Yin (1994) states that the case study approach “allows an investigation to return the holistic and meaningful characteristics of real life events - such as individual life cycles, organizational and managerial processes...and the maturation of industries”. As Stewart and Gable (1999) comment:

- This approach is appropriate to understanding ERP implementation issues because the research objective is to characterize the organizational and managerial processes constraining such implementations,
- It provides useful skills to researchers,
- It is most appropriate to understanding the interactions between the issues (as theoretical construct) and the context within which these issues are operating.

According to Yin (1994, p. 77), “the pilot case study helps investigators to refine their data collection plans with respect to both the content of the data and the procedures to be followed. The pilot case is used more formatively, assisting an investigator to develop relevant lines of questions – possibly even providing some conceptual clarification for the research design as well”. The pilot case study serves as a preparation for the in depth case study. Since there were no studies related with this topic, the pilot case study also served as an exploratory case study.

The data collected in our pilot case study was analyzed using Grounded Theory (GT) method. GT is a general methodology for developing theory that is grounded in data systematically gathered and analyzed. Strauss and Corbin (1990, p. 23) explain that by using GT method “a theory is inductively derived from the study of the phenomenon it represents. That is, it is discovered, developed, and provisionally verified through systematic data collection, analysis, and theory stand in reciprocal relationship with each other. One does not begin with a theory, and then prove it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge”. GT method seems particularly useful for this doctoral research since there is a lack of theoretical foundation in ERP implementation topics.
Another important characteristic of GT method is that it facilitates "the generation of theories of process, sequence, and change pertaining to organizations, positions, and social interactions" (Glaser and Strauss 1967, p. 114). This seems particularly useful in our research since the literature reveals that organizational perspective has a strong influence on ERP implementations.

4.5.5 Key performance indicators

In this phase we developed a set of Key Performance Indicators (KPIs) for each CSF in order to improve the management, control and monitoring of the CSF defined previously. We used the Goals/Questions/Metrics (GQM) method. The GQM approach is a mechanism for defining and interpreting operational, measurable goals. It was developed at the University of Maryland as a mechanism for formalizing the tasks of characterization, planning, construction, analysis, learning and feedback. GQM does not provide specific goals but rather a framework for stating measurement goals and refining them into questions to provide a specification for the data needed to help achieve the goals (Basili et al. 1994). The GQM top-down approach assists managers and developers not only in knowing what data to collect but also in understanding the type of analysis needed when the data is in hand (Pfleeger et al. 1997). Because of its intuitive nature the approach has gained widespread appeal. As a result, we proposed a GQM preliminary plan with different metrics to monitor and control CSF while implementing an ERP system.

4.5.6 Confirmatory case study

To validate all our previous research we have recently conducted an in-depth case study combined with the GT method of an ERP implementation in a big Spanish university. This case study may be considered a critical case (Yin 1994). This ERP implementation was selected because the authors maintain a very close relationship with that university, thus, we can understand better the ERP implementation context, and second, this ERP implementation was the first to implement a specific ERP, in this case the SAP system in a Spanish university with the ISPS module for budget management.

Nowadays, this last aspect also makes it a unique case study in Spain. Different research techniques have been used to collect data and to increase credibility and validity to the case study (Yin 1994).

Again, the data collected was analyzed through the GT method. In this doctoral research program we adopt Strauss viewpoint of GT method rather the one by Glaser. The key distinction relates to the position the researcher takes in relation to the data. Glaser (1992, p. 4) states that a GT can only be grounded in the data and would otherwise be a preconceived conceptual description of the phenomenon under investigation. Glaser (1992, p. 22) states that a preconceived research problem will necessarily obstruct the researcher's view of the data while Strauss and Corbin (990) suggest several sources of research problems including suggested or assigned (for example by a professor to a graduate student), technical literature, and personal and professional experience. They believe that "the research question in a grounded theory study is a statement that identifies the phenomenon to be studied" (Strauss and Corbin 1990, p. 38). For Glaser (1992, p. 22) the researcher begins his or her study "with the abstract wonderment of what is going on that is an issue and how it is handled". The second main divergence concerns theory generation versus theory verification. Strauss and Corbin (1990) emphasize on verification and validation of theory and hypotheses "throughout the course of a research project" (Strauss and Corbin, 1994, p. 274). In Glaser's opinion, verification falls outside the parameters of grounded theory which instead should be directed at the discovery of hypotheses or theory. Glaser reminds the reader that the verificational model was "exactly what we had tried to get away from" (Glaser and Strauss 1967, p. 67).

This choice has implications for the research design and the research outcomes. We acknowledge these differences. However, our idea in using the GT method is not to provide a grounded theory of ERP implementations as stated by Glaser (1992) but we instead combine the GT method with the case study method to provide a theory that is grounded in data collected from the case studies. Our main purpose for using the GT method is to serve as a research
method to analyze the data collected in our case studies.

5. Trustworthiness of the research

In qualitative research the requirements of validity and reliability are under enthusiastic discussion. There are interpretations that these traditional measures of reliability are not applicable at all in qualitative research because of the nature of the methods and epistemological assumptions of the research, which promote the uniqueness of the research. On the other hand, there are also demands for using the same criteria for qualitative and quantitative research when evaluating the trustworthiness of the research. Between these poles are many different variations for justifying the results of the research. However, the issue of trustworthiness cannot be avoided whatever the epistemological approach of the research (Gibbs 2002, p. 13).

Lincoln and Guba (1985) described the criteria that are frequently cited for evaluating qualitative studies. They address the criticisms leveled at naturalistic research and determine that quality rests in trustworthiness of the study and its findings. They agree with others that conventional criteria are inappropriate for qualitative studies and they proposed: (1) credibility, (2) transferability, (3) dependability, and (4) confirmability, as the alternative the criteria. Next, we describe each research evaluation component.

5.1 Credibility

Credibility refers to the accuracy or credibility of the findings, or it can be described as a “truth formulating process” between the researcher and the informants (Lincoln and Guba, 1985). The goal is to demonstrate that inquiry was conducted in a way which ensures the subject was accurately described. To maximize credibility, Lincoln and Guba (1985) suggest a number of techniques:

- Increase the likelihood that credible findings and interpretations are produced through prolonged engagement, persistent observation, and triangulation.
- Use peer (stakeholder) debriefing to provide an external check on the inquiry process.
- Use negative case analysis to refine the emerging results.
- Make a direct test of findings and interpretations by checking them with participants.

A common technique used is the stakeholder check. Stakeholder checks might involve opportunities for people with a specific interest in the research, such as participants, service providers, funding agencies, to comment on categories or the interpretations made (Erlandson et al. 1993, p. 142). With regard to triangulation, Patton (1987) discusses four types of triangulation in doing evaluations, that is, the triangulation:

- Of data sources (data triangulation),
- Among different evaluators (investigator triangulation),
- Of perspectives on the same data set (theory triangulation) and
- Of methods (methodological triangulation).

Yin (1994) provides a list of data sources that can be used during data source triangulation such as interviews, analysis of documents and direct observation. Bratthall and Jorgensen (2002) extended Yin’s (1994) work by adding some practical guidelines for use during data source triangulation. The triangulation among evaluators will be made by contrasting perspectives among the doctoral student and the doctoral supervisor.

5.2 Transferability

An alternative concept to the logical positivist’s generalizability construct (or external validity) is Lincoln and Guba’s (1985) transferability. In Lincoln and Guba’s (1985) use of the term, “transferability” implies generalizability of the findings and results of the study to other settings, situations, populations, circumstances, etc. The idea beyond generalizability on qualitative studies usually is based, “not on explicit sampling of some defined population to which the results can be extended, but on the development of a theory that can be extended to other cases” (Maxwell 1996, p. 97). Transferability is relative and depends entirely on the degree to which...
salient conditions overlap or match. This is mostly verified through “thick” description. The researcher does not provide the confidence limits of the study, but instead provides as complete a data base as possible in order to facilitate transferability judgments on the part of others.

With regard to case study method generalization, Yin (1994, p. 30) noted that another way of thinking about case research is that its results should be generalized to a theory, named analytic generalization in contrast with statistical generalization. “In statistical generalization an inference is made about a population (or universe) on the basis of empirical data collected about a sample” Yin (1994, p. 30) while “in the analytical generalization, the researcher is striving to generalize a particular set of results to some broader theory” (Yin 1994, p. 36).

One of the procedures that may be available to establish transferability, applicable to all but the most exploratory of qualitative studies, is to see whether a given theory or model that the qualitative researcher claims to be testing or applying has, in fact, been accurately interpreted and used in the research. This may be interpreted as a check of 'content accuracy.'

Finally, perhaps the most defensible indicator of transferability is to look for evidence of multimethod procedures in the design and/or analysis of the qualitative study. By applying such different methods and procedures and then triangulating or comparing the different ‘paths’ or results to see if they ‘converge’ upon the same findings and results, serve to enhance the believability and robustness of the results - more so than if a single method were used.

5.3 Dependability

This is concerned with the stability of the data over time. Dependability requires accounting for dynamic changes in the phenomenon of study, design, or methodology as appropriate (Lincoln and Guba 1985). Therefore, there is the need to be able to demonstrate any changes or shifts in the way in which the inquiry was conducted. In order to assess the degree of dependability, Lincoln and Guba (1985) advise us to look for accurate and adequate documentation of changes, surprise occurrences, and the like, in the phenomena being studied. If change is to be expected, has it been thoroughly described? Similarly, have any unexpected but material occurrences which might affect our variables of study been identified and documented with adequate detail?

Lincoln and Guba (1985) pointed out that dependability is difficult to predict in a changing social world. In establishing dependability, the researcher attempts to account for changing conditions in the phenomenon chosen for study as well as changes in the design created by increasingly refined understanding of the setting.

5.4 Confirmability

This quality, according to Lincoln and Guba (1985), is synonymous with objectivity. Need to show that data, interpretations and outcomes inquires are rooted in contexts and persons apart from the evaluator and are not simply figments of the evaluator’s imagination. All data needs to be able to be tracked to its source and that the logic used to assemble the interpretations into structurally coherent and corroborating wholes is both explicit and implicit in the narrative of the case study. Evidence for this quality may be established in two ways:

- Via our more traditional notions of credibility: is there a smooth logical progression, as evidenced in the research report. This one, then, depends on the 'internal logic' of the study and particularly how thoroughly and skillfully it is substantiated in the narrative of the research report. Is there a 'natural flow,' or a 'Grand Canyon leap of faith?!' Does it “feel real?!"
- Via some evidence of lack of the researcher's own bias: such as, for instance, doing 'member checks' and running his/her findings and conclusions past third parties, "key informants" from the same or similar field setting as the original study, etc. Perhaps this one is 'established in reverse:' that is, do you see anything in the research report to indicate to you a potential bias on the researcher's part? Premature closure regarding the findings?
Unwillingness to thoroughly search out and account for potential ‘disconfirming’ evidence? And so forth.

This doctoral research project is found to follow the trustworthiness components described above and thus the research was evaluated against them.

6. Considerations and further work

This paper explores the use of multimethod design. One of the main considerations in the application of a multimethod approach is the knowledge needed about the different research methods. Each research method has its strengths and weaknesses. Like Morse (2003) suggests, one of the main strengths of multimethod approach is to obtain a different level of data. These data provides a more comprehensive picture of the findings. One of the limitations of our study is the lack of discussion about the analysis of the research evaluation. Although new models for multimethod design have been proposed by colleagues, there is a lack of studies on multimethod research evaluation. From our experience on this issue, in the future we will attempt to define a research evaluation framework for multimethod design taking into account the different types of multimethod designs.

7. Acknowledgements

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Using the Glaserian Approach in Grounded Studies of Emerging Business Practices

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Abstract: Based on a recently completed major study of an emerging business practice in the area of information systems management, this paper explains and discusses several important aspects of using the “Glaserian” approach to grounded theory. Grounded theory is an effective approach to produce rigorous research that is simultaneously relevant to business and management theory development and to professional practice. The paper presents a research model and delineates a number of characteristics, risks and demands intrinsic to the method, which can help researchers contemplating the use of grounded theory methodology for their studies.

Keywords: Grounded Theory, Glaserian Approach, Information Systems Research, Socio-technical Studies

1. Introduction

To be relevant to the practitioner’s concern, theory needs to provide meaningful accounts that could be used in emerging business practices. However, the search for “relevance” does not necessarily imply lack of research rigour, or even relevance versus rigour. I perceive relevance and rigour as compatible and enhancing elements of academic work (a view also shared by Mason, 2001, Robey and Markus, 1998, Stokes, 1997). Furthermore, I have argued that relevance and rigour can be achieved simultaneously by using the grounded theory method (GTM) (Fernández et al., 2002) mainly because:

(a) GTM allows researchers to deal effectively with the important issues of bias and preconceptions, and provides a systematic approach that takes into consideration extant theory but is not driven by it (Glaser and Strauss, 1967, Urquhart, 1997, Urquhart, 2001, Sarker et al., 2001). Also, triangulation is embedded in the methodology, which facilitates achieving conceptualisations based in multiple perspectives and data sources (Glaser, 1978, Glaser, 1998, Glaser and Strauss, 1967).

(b) GTM can help researchers to avoid stating the obvious to the expert and instead provides categories based on many indicators and showing ideas based on patterns. These conceptual ideas allow practitioners to transcend the limits of their own experience, adapting and applying the substantive theory to other situations. Thus, by following the grounded theory methodology, researchers can significantly contribute by providing knowledgeable people with theory grounded in their field of work that has been enriched by conceptualisation and extant literature from multiple sources (Eisenhardt, 1989, Glaser, 1998, Glaser, 1978).

However, the method, while simple in nature, often appears daunting, or at least difficult, to the uninitiated. For example, an earlier article in this journal described a number of difficulties encountered by a researcher while using GTM; these difficulties were mainly related to coding and reaching saturation through conceptual emergence (Allan, 2003).

To further contribute to the understanding of the grounded theory method and its application to business studies, this paper presents a personal view of GTM which was generated from practicing GTM (rather than “philosophising” about it). Therefore, the discussion that follows centres on processes and issues I confronted while conducting a grounded theory study to investigate an emerging business practice in information systems management: the metateam project.¹

¹ Metateams are virtual teams of teams, which work in a common major collaborative project where teams belong to different firms that are engaged in specific and temporal contractual arrangements. Metateams result from the convergence of information technology outsourcing practices, virtual organisations, enabling technology, and demands for both global competitiveness and rapid delivery of business solutions.
2. The grounded theory method


Martin and Turner (1986 p.141) defined grounded theory as an "inductive theory discovery methodology that allows the researcher to develop a theoretical account of the general features of the topic while simultaneously grounding the account in empirical observations of data." (Grounded theory is also a deductive method: see 7). In grounded theory everything is integrated; it is an extensive and systematic general methodology (independent of research paradigm) where actions and concepts can be interrelated with other actions and concepts and nothing happens in a vacuum (Glaser and Strauss, 1967, Glaser, 1978). Among a number of tenets, there are two key beliefs of grounded theory:

(a) The research must not start with a theory to prove, disprove or extend. When unavoidable, deep-rooted beliefs can be captured as text and then analysed with other text as just another incident in data (Glaser and Strauss, 1967, Glaser, 1978).

(b) Grounded theory is discovered through constant comparison between incidents and properties of a category. Trying to observe as many underlying uniformities and diversities as possible is the essence of grounded theory.

As with many other methods, grounded theory evolved with practice, this evolution resulted in a colourful public disagreement between Glaser and Strauss as to how to conduct grounded theory research. Thus, the two main approaches to grounded theory are often called ‘Straussian’ and ‘Glaserian’ (Stern, 1994). This article does not aim to take part on an old debate; rather, its focus is to depict how I used the Glaserian approach to study an emergent business practice. To achieve this objective, it is first necessary to present a research model in order to enable the understanding of the whole process and its issues. This is discussed in the next section.

3. Research models for grounded theory studies

Explaining simply and correctly a method that “happens sequentially, subsequently, simultaneously, serendipitously and scheduled” (Glaser, 1998 p. 1) is challenging. One simple way of representing the grounded theory process is found in Lehmann (2001). Here the grounded theory process is represented as a spiral that starts by collecting slices of data in a substantive area of enquiry, which are then codified and categorised in a continuous process that moves toward saturation and results in the theoretical densification of concepts represented by a substantive theory (Figure 1).

![Figure 1: Grounded theory’s building process (Lehmann, 2001).](image-url)
Although Figure 1 provides a good high-level view of the process of grounded theory, the model fails to include some critical activities. Thus, I expanded Lehmann’s (2001) model by:

1. Adding components from Eisenhardt’s (1989) seminal article on building theories from case studies. In particular the process of entering the field, which includes (a) defining the research problem and (b) ensuring theoretical flexibility and relevance by careful selection of cases.

2. Adding components from the Glaserian literature to highlight the importance and role of theoretical memos and extant literature in a GTM study.

By doing so, it was possible to present a picture that both includes all key aspects of the method and provides an accurate depiction of the iterative nature of the method. This is presented next in Figure 2, followed by a discussion.

**Figure 2:** Expanded Lehmann’s (2001) research model.

**Entering the Field** is the first research action to be conducted in the context where the phenomenon is found. To enter the field I considered three important aspects:

1. Following the grounded theory tradition, ‘the problem’ was to be discovered from participants’ accounts. The initial research question was as broad as possible and did not include *a priori* constructs or guiding theories.

2. I had to address practical issues like crafting ethical protocols and obtaining approval, selecting the software and hardware required for interviewing and processing the data, producing transcription protocols, and being trained to administer leadership surveys.2

3. Entering the field included preparation work such as selecting an appropriate

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2 These surveys, MLQ and MLQTeam, were designed to measure the leadership style of the project manager and the project team. The purpose of the survey was twofold: (a) to measure *a priori* the leadership style of the team and of the project manager, based on a suspicion that leadership was a key issue; and (b) to have data from the survey to later compare with evidence from interviews if leadership emerged as a main concern (it did not). The surveys had the secondary goals of introducing the team to the research and to establish rapport (in this regard the exercise was successful).
site, obtaining access to the case, getting consent from the participants and contacting them.

From that point, I became involved in Theoretical Sampling. Theoretical sampling is a data collection process that continues until the very end of the research (including the write-up stage). This allowed me to take advantage of emergent themes, acquire data continuously and maximise observation opportunities.

All interviews were recorded in both digital and analogue forms. The tape recording was then transcribed and ATLAS.ti, a software application for qualitative data analysis, facilitated Open Coding and other coding activities.

Open coding involves analysing the data to extract a set of categories and their properties. This is done by coding for as many categories as possible without a preconceived set of codes (Glaser, 1978). During open coding, I labelled the text of each interview, detecting new lines of enquiry, which guided subsequent data acquisition activities (337 codes were generated). While I read the text line-by-line I was primarily concerned with understanding the concept under discussion. That is, I was more interested on what was going on than on the words used to describe incidents. This characteristic of the Glaserian approach significantly reduced the drawbacks associated with microanalysis (Allan’s (2003) account of the Straussian coding technique suggests that analysing the text word-by-word- and line-by-line is a protracted and at times confusing activity). Furthermore, by concentrating on coding and explaining what is going on, one is naturally drawn to the next critical activity in grounded theory: the production of theoretical memos.

The writing of Theoretical Memos starts almost in parallel with open coding. Because memos are “the theorizing write-up of ideas about codes and their relationships as they strike the analyst while coding” (Glaser, 1978 p.83). Memos are produced constantly in grounded theory, from the beginning of the analysis process until reaching closure, capturing the thoughts of the analysts while they progress through the work. Memos raise the theoretical level via a continuous process of comparison and conceptualisation. They also provide freedom, flexibility, and enhance creativity (Glaser, 1978).

As codes and memos accumulated, I started to perceive relationships between them. This process, called Theoretical Coding, conceptualised the interrelation of substantive codes by generating hypotheses for integration into a theory. The integration of concepts is a flexible activity that provides broad pictures and new perspectives; yet, however flexible, theoretical codes must remain grounded on data, they cannot be empty abstractions. Flexibility implies theoretical sensitivity to a number of possible coding paradigms, or coding families, consciously avoiding over-focusing on one possible explanation.3

The emergence of a pattern, in my study’s case resolving conflicts, marked the beginning of Selective Coding. This process refers to delimiting the theory to one (or two) core variable(s) which acts as a guide for further data collection and analysis (Glaser, 1978:61-72). By doing so, the research focused on one of the several basic social processes or conditions that are present in the data. The delimitation of the analysis to those significant variables affecting the core variable contributes to parsimonious theory (Glaser and Strauss, 1967). In my study, the significant interrelated variables identified were Trust, Communication, Conflict and Cost.

At this point in the process, the role of the Extant Literature becomes very important, the researcher needs to acquire sensitivity and knowledge on grounded concepts. The literature is therefore read as a source of more data to be compared with existing grounded data. For example, readings about trust, shared mental models, conflict, psychological contracts, transaction cost economics, and organisational psychology raised the theoretical level and improved construct definitions (as suggested by Eisenhardt,

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I achieved **Theoretical Saturation** when I was able to account for the main concern of the research and further sampling failed to add significant value to the study (i.e. new categories or properties).

At this stage, the theory became dense with concepts and enriched by relevant extant literature: I discovered a **Substantive Theory**. Substantive theories are applicable to the particular area of empirical enquiry from where they emerged (Glaser and Strauss, 1967). They can be classified as ‘middle-range’ theories; that is, between ‘minor working hypotheses’ and ‘grand-theories’ and they are relevant to the people concerned and are readily modifiable (Glaser and Strauss, 1967). In my case, the substantive theory was able to explain the interplay of trust, cost, conflict and communication in major information technology projects enacted by multiple teams and multiple firms.

4. **Particular characteristics of the method**

Researchers doing grounded theory often have to deal with issues of unfamiliarity with the methods (own or others’) regarding methodological aspects such as the role of the extant literature, the unit of analysis, or the use of analysis tools. This section presents some of these aspects.

4.1 **Role and place of the literature in a grounded theory study**

The approach of reading the literature first with the objective of identifying gaps and relevant theories is opposite to the role that the literature has in grounded theory. Glaser is very specific in this regard:

> Grounded theory’s very strong dicta are a) do not do a literature review in the substantive area and related areas where the research is done, and b) when the grounded theory is nearly completed during sorting and writing up, then the literature search in the substantive area can be accomplished and woven into the theory as more data for constant comparison.⁴

(Glaser, 1998 p.67)

The purpose of these dicta is to keep the researcher as free as possible of influences that could restrict the independence required for theoretical discovery, not to ignore extant and relevant knowledge. Adopting a grounded theory method commits the researcher to a rigorous and constant literature review process that occurs at two levels:

1. the researcher must be constantly reading in other substantive areas to increase their theoretical sensitivity, and

2. conceptual emergence forces the researcher to review convergent and diverging literature on the field related to the developing concept.

Because emerging theoretical construction drives the literature review, the extant literature is incorporated into the study as data. Therefore, to be true to the method, most of the relevant reviewed literature needs to be presented as it finds its way into, and becomes integrated with, the substantive theory – “forcing” a typical PhD dissertation’s ‘Chapter 2: literature review’ would be methodologically unsound, detracting from the true role of the literature in grounded theory.

4.2 **Unit of analysis**

The *qualitative datum* is defined as a string of words capturing information about an *incident*; this incident is the unit of analysis and represents an instance of a concept coded and classified during the coding process (Van de Ven and Poole, 1989). The source of the datum may be a person, a group, a document, an observation, or extant literature.

Incidents are indicators of a concept. The constant comparison of indicators confronts the analyst with similarities, differences, and consistency of meaning which result in the construction of a concept (or category) and its dimensions. **Figure 3** represents a process of induction and deduction where the comparison of indicator to indicator generates a conceptual code first and then indicators are compared to the emerged concept, further defining it.

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⁴ Bold text in the original.
In studying emerging socio-technical phenomena it is important to focus on indicators of actions and accounts of actions, which occur in a particular context and within a process enacted and constructed by the actors. Consequently, the study needs to consider the need to focus on properties of a process versus properties of an actor or unit (as a person, group, or organisation).

4.3 Focus on process not on units
Properties of a unit are more relevant to descriptive qualitative studies while properties of a process are more relevant to studies aiming at theoretical conceptualisation (Glaser, 2001, Glaser, 2002, Glaser, 1978). My metateams study, for example, aimed to provide a theoretical conceptualisation of a basic social process (BSP).

According to Glaser (1978), basic social processes can be of two types: basic social psychological process (BSPP) and basic social structural process (BSSP). BSPP refer to process such as becoming (e.g.: a nurse, a leader, a system) or inspiring (e.g.: followers, peers) and are useful in understanding behaviours. BSSP are concerned with social structures in a process (e.g.: centralisation, organisational growth, outsourcing, or recruiting). Basic social processes are a type of core category (not all core categories are BSP), exhibiting the following characteristics:

1. BSPs “process out” at least two emergent stages that “differentiate and account for variations in the problematic pattern of behaviour” (p.97).
2. BSPs are ideally suited to qualitative studies where the analyst observes the evolution of a process over time (i.e., influencing outcomes in a project).
3. BSPs are labelled by a gerund that reflects their evolving nature and a sense of motion (e.g., resolving, influencing, becoming).

As BSPs may or may not be present in a grounded theory study, their presence (or lack thereof) further guides the research design and execution. Thus, understanding the distinction between doing unit-based or process-based sociological analysis is critical to the research design, as these dissimilar objectives place particular demands on sampling, analysing and theorising.

5. Theoretical sampling
In grounded theory, sampling is driven by conceptual emergence and limited by theoretical saturation, not by design. Theoretical Sampling is the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyzes his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges. This process of data collection is controlled by the emerging theory, whether substantive or formal (Glaser and Strauss, 1967 p.45).
Consequently, the selection of data sources is neither a random selection nor a totally a priori determination. For example, I decided a priori that a combination of data sources was most appropriate for this study; however, the specific details of what data was available and which of the available data was relevant, depended on the emerging data itself.

Another critical a priori sampling decision was to control the variation by organisational delimitation while allowing for within-case diversity of access to multiple data sources. This allowed controlling environmental variation while clarifying the domain of the research, as suggested by Pettigrew (1988).

To counteract the risk of sampling too superficially I also selected a case study that provided the “meatiest, most study-relevant sources” (a strategy recommended by Miles and Huberman, 1994). The selected project also provided the best accessibility; this practical consideration was later proven critical as in-situ observations gave me a better appreciation of what was going on and of what was important to the actors. Furthermore, listening to the somehow heated discussion between two parties with conflicting interests in real-time (versus reconstructed evidence) gave me yet another perspective.

6. The core category: role and selection criteria

To generate substantive theory, the analyst must discover the core category and delimit the investigation around it. The core category is the pivotal point for the theory; most other categories relate to it, and it accounts for most of the variation in pattern and behaviour. The core category “has the prime function of integrating the theory and rendering the theory dense and saturated as the relationships increase” (Glaser, 1978 p.93).

In the metateam study, the core pattern was “resolving conflicts”, a basic process that engaged actors (people and organisations) in a series (pattern) of activities aimed at resolving incongruence and misunderstandings. Resolving conflicts is how managers of metateams (and the component teams) achieved project delivery. The core category in the resolving conflict pattern was “trust,” which had a number of key interrelated categories that explain the core pattern.

7. Induction and deduction in grounded theory

While grounded theory is classified as an inductive method (e.g., Glaser and Strauss, 1967, Glaser, 1978, Strauss and Corbin, 1998, Martin and Turner, 1986) theoretical sampling is a deductive activity grounded in inducted categories or hypotheses. This acts as a virtuous circle where “[d]eductions for theoretical sampling fosters better sources of data, therefore better grounded inductions” (Glaser, 1998 p.43). The difference between an inductive and a deductive method relates to ‘pacing’; if the researcher looks at data first and then forms hypotheses (inductive), or if the researcher forms the hypotheses first by conjecture and then seeks for research data to verify the deduction (deductive) (Glaser, 1998). This cycle of induction and deduction is represented in Figure 4.
Figure 4: The inductive-deductive cycle of the grounded theory method.

Two practical aspects of my research facilitated both induction and deduction activities, namely: (a) recording and transcribing interviews and (b) using a qualitative data coding and analysis tool. These activities are discussed in the next two sections.

8. Recording and transcribing interviews

Glaser does not encourage the use of tape recording (Glaser, 1998). Glaser argues that recording is unnecessary because the researcher is after important concepts and patterns not precise accounts as in other, more descriptive, methods. Therefore, for conceptualisation purposes the actual words are not as significant as they belong to one of many possible units in a process. Another perceived problem with recording is that it becomes time consuming and inefficient for this type of research; interviews are taken for transcription and then corrected, causing the analysis of many non-important parts. Glaser is very conscious of wasting time in what he considers superfluous activities.

However, not recording is too risky a strategy to follow. Above and beyond fulfilling the need for evidence in a study, by recording and transcribing interviews, researchers can revisit and re-code text as more evidence emerge and patterns are detected. The ability to have access to the full transcription and to replay the interview at any time is a distinct advantage, especially in studies of organisational cases that are conducted over a long period of time.

In addition, the iterative nature of grounded theory demands the constant comparison of incidents with already collected data; in doing so, previously undetected incidents are likely to emerge. These new incidents could benefit the study and therefore justify the extra effort required to record, transcribe, and code potentially irrelevant data.

In the metateam study, I recorded interviews using analogue and digital technology. The analogue tape was then professionally transcribed. While Open Coding an interview for the first time, I would load the transcription onto ATLAS.ti and simultaneously play the digital (MP3) version of the interview on my computer. This combination of actions had two effects. First, it improved recollection and stimulated mental activity as the interview was recreated with sound not just text. As a result, the production of memos was prolific. Second, it allowed the correction of transcription errors that can be very frequent due to the technical jargon used by actors.

As Glaser predicted, the extra time involved in open coding full interviews, rather than coding just the important concepts, was substantial. However, the detailed analysis helped to acquire a deeper understanding of the issues. This understanding facilitated the emergence by discovery of the core concept and made me more comfortable with the coding activity. As re-listening to the actors

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5 The reason for using analogue technology was related to the tools used by the professional transcribers available at the time. Digital recording is a better and more flexible option.
often triggered theoretical memos and facilitated the finding of relations, I considered this as a productive activity, not a wasteful one.

9. Using qualitative data coding tools

Glaser (1998 pp.185-186) also alerts against the 'technological traps' of data analysis tools such as NUDIST (or ATLAS.ti in my case) because they create unnecessary restrictions, inhibit the researcher's development of skills, and impose time-consuming learning curves. Glaser perceives computing technology as an easy way out and as a hindrance rather than an aid to creativity. To be sure, computing tools can be used in many ways and some of those ways will indeed have the negative consequences Glaser mentioned; yet the opposite can also be true.

For instance, using ATLAS.ti for open coding and memoing was a substantial advantage in my study; it provided a fast way of checking and comparing incidents and the flexibility of exporting data to other tools as I perceived appropriate and necessary. The software ability to collect memos allowed the efficient writing, analysis, and retrieval of memos at any time in the process. It is also true that ATLAS.ti was not everything I needed. A number of tools and techniques contributed to my study. I used butcher's papers and a white board to draw box diagrams representing the interrelation of emerging concepts. I drew many types of diagrams on notepads or flowcharting software and used a word processor to analyse sets of incidents and memos. I also found very useful to use a mind mapping software package (MindManager) to organise and visualise my thoughts. Therefore, Glaser is correct in asserting that this is creative work, yet retrieving and connecting concepts was extremely easy and efficient. Also, while ATLAS.ti has some automated coding facilities (i.e., coding all occurrences of a word or phrase), coding was done entirely manually. Automatic coding is a disadvantage for the grounded theorist as it obscures the discovery of what is going on in the text; in this regard, Glaser's reservations are fully justified.

10. Demands and risks of grounded theory

Every methodology poses particular demands and Grounded Theory is not an exception. Based on my own experience and discussions with other grounded theorists, I strongly concur with the advice provided by Glaser (1978, 1998, 2001); that is, the grounded theorist must:

1. Tolerate confusion—there is no need to know a priori and no need to force the data.
2. Tolerate regression—researchers might get briefly 'lost' before finding their way.
3. Trust emerging data without worrying about justification—the data will provide the justification if the researcher adheres to the rigour of the method.
4. Have someone to talk to—grounded theory demands moments of isolation to get deep in data analysis and moments of consultation and discussion.
5. Be open to emerging evidence that may change the way the researcher thought about the subject matter, and to act on the new evidence.
6. Be able to conceptualise to derive theory from the data.
7. Be creative—devising new ways of obtaining and handling data, combining the approach of others, or using a tested approach in a different way.

Additionally, due to the minority status of grounded theory some research arenas (such as Information Systems research), it is likely for researchers, specially Ph.D. candidates, to experience what Stern (1994), described as Minus-mentoring—that is, learning from books, employing grounded theory for the first time without
the guidance of a supervisor with practical knowledge of the methodology. ‘Minus mentees’ can reduce this risk by (a) networking with researchers conversant on the methodology; (b) reading the wide Grounded Theory bibliography (Urquhart, 2001); and (c) participating in relevant discussion groups.

It must also be recognised that sometimes minus mentees can face issues of prejudice, or “methodological turf”, within their local research community. Namely, they may have to confront negative comments from learned colleagues or supervisors lacking a deep understanding of the grounded theory method. Often these comments are simply ill-formed opinions destined to influence the minus mentee’s methodological decision towards a more “conventional” approach. When this happens, researchers must assess (a) the level of opposition—and their own level of commitment—to the grounded theory method, (b) the source, intention and influence of the opposition, and (c) their own ability to respond to this opposition with academic rigour.

Finally, a grounded theory emerges through intensive intellectual action. Researchers need to interact with their data and while this interaction is often highly rewarding and satisfying, it is also extremely intensive, time consuming and all-absorbing, and the researcher must be persistent (as also attested by Urquhart, 2001).

11. Conclusion

The previous sections discussed processes and issues I confronted while using the grounded theory method over a period of two years. I presented a research model that follows the Glaserian approach to grounded theory and highlighted some particular characteristics of the approach and briefly stated some demands and risks of the method.

Grounded theory is a rigorous method that allows researchers to produce theory that is relevant to business people. Relevance for the grounded theorist means bringing tangible benefits to the experts. According to Glaser (1978 p.14), when the field experts can understand and use a theory by themselves “then our theories have earned their way. Much of the popularity of Grounded Theory to sociologists and layman alike, is that it deals with what is actually going on, not what ought to go on”. Thus, the grounded theory can facilitate the emergence of clear, logical and parsimonious theory that both (a) fulfils the canons of good science and (b) can be used in IS practice to explain and predict the phenomena on its environment. In other words, the researcher can produce theory-building studies which are rigorous, useful, relevant and current.

Yet, when investigating emerging business practices it is paramount to use a method that facilitates and motivates actors’ participation. I experienced a high level of cooperation from the participants while conducting the grounded theory study. This can be partly attributed to: the open nature of the interviews; the focus on experiences as perceived by the actors and the method forcing me to act as a very active listener. Research that focuses on actors’ perspectives provides actors with opportunities to articulate their thoughts about issues they considered important, this articulation allows participants to reflect on empirically significant events (to them), gaining further understanding of past actions and acquiring new insights.

From a more personal point of view, I was intellectually stimulated by the participants’ positive attitude towards the research, which gave me access to richer data (such as invitations to attend meetings, or sharing documents and e-mails). I also had a sense of contributing to a wider audience through conceptualisations that were not restricted by the case studied, and yet firmly grounded on it, this positive feeling helped to counteract the heavy demands of the grounded theory method.

References


Issues in Online Focus Groups: Lessons Learned from an Empirical Study of Peer-to-Peer Filesharing System Users

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Abstract: The development of easy-to-use Internet tools for synchronous communications has made a new research method possible: online focus groups. Attempts to apply them to questions formerly addressed by face-to-face focus groups have resulted not only in promising avenues for research, but also in substantive criticism. We have chosen to adopt online focus groups as a research methodology for a qualitative study of user beliefs and attitudes concerning peer-to-peer filesharing systems. This project is still in its early stages, so herein we describe not confirmatory findings of rigorous research, but the issues raised by our exploratory study, and indications of important issues to address in the use of online focus groups. This paper also demonstrates a novel analysis method which visually maps one of the unique characteristics of such groups, multi-threaded simultaneous conversations, and uses such maps to identify some notable tendencies and behaviors. We also identify some typical participant strategies we have observed, describe some skills and techniques for use in moderating such sessions, identify some powerful advantages provided by the instant and automatic transcript generation capabilities of chat session software, and characterize some important research questions to be addressed in future research.

Keywords: online focus groups, qualitative, focus group methodology, file-sharing, digital music, digital media

1. Introduction

The Internet is a rich source of data for many questions of interest to researchers in such fields as the Social Sciences, Information Systems, Computer Science, Marketing and Management Science, to name just a few, and Internet studies have employed both qualitative and quantitative methods. Widely available Internet applications, particularly for communications, have matured to the point at which the Internet can now be exploited not only as a data source, but also a platform for conducting research, such as studies utilizing online surveys (Sheehan and Hoy, 1999; Couper 2000). One qualitative method taking advantage of the new technology which seemed rich with promise was the use of Internet-based synchronous communication tools such as Chat to conduct online focus groups. While face-to-face focus groups to conduct qualitative research are widely used and accepted (Millward, 2000; Fern, 2001), online focus groups, particularly those done for the purposes of market research, did not always produce the desired results. As a result, some researchers have concluded that online focus groups cannot substitute for the traditional face-to-face focus group methods. Among the difficulties and limitations they encountered in their studies were the following: diminished role of the moderator, limited online group dynamics, lack of non-verbal inputs, limitations regarding observer involvement and monitoring, participant anonymity, limitations in exposing participants to external stimuli, and limitations caused by technical difficulties.

We are conducting a qualitative study of the attitudes and behaviors of users and innovators in the digital music world, particularly in regard to the use of peer-to-peer filesharing systems. Since these are behaviors and attitudes inherently derived from and occurring on Internet applications, we felt it was appropriate to explore the possibility of conducting the research itself on the Internet, through online focus groups. Our preliminary results indicate that it may be useful to re-examine the skeptical views of online focus group methods in light of specific technologies, research questions, sample groups, and other factors. Our study uses Blackboard© electronic learning software and its built-in virtual classroom feature to conduct online sessions, during which participants discuss their experiences with downloading and trading digital music, in
response both to questions from the moderator and to comments from each other.

It is not necessary to conclude that online focus groups are uniformly unsatisfactory. Instead, we propose that their usefulness and appropriateness is related to the specific research context. For example, while online focus groups may fall short in attempts to evaluate new tangible products or other marketing-oriented research, we believe that they can be beneficial for exploratory research, experiential research (particularly of online experiences), and theoretical research, including both theory development and theory-supporting studies.

Based on the experience from our own study, we will outline issues which point towards a new online focus group methodology as an extension of the traditional methodology. We identify research contexts as appropriate if the studied phenomenon occurs in an online environment, and if the studied actors perform mostly online as well. We use file-sharing among members as an example of a research context that is suitable for online focus group research. We discuss how to address previously identified problem areas in online research. We discuss the benefits of online research in terms of cost of running sessions, the possibility of using participants in different locations, the nature of the data thus generated, and automatically generated transcripts. We also discuss the limitations and technical requirements of this new research approach, and address the specific objections to online focus groups which have appeared in the literature.

2. Online qualitative research

The Internet is a rich potential source of data for qualitative analysis. Researchers have begun to take advantage of several of the communication modes available on the Internet, such as private email, email lists, public posting forums, instant messaging, and multi-user chat areas. These communication modes, and user familiarity and comfort with them, have matured to the point where qualitative methods can be applied not only to research about the Internet, but to using the Internet itself as a component of one's research tools. While there have been many studies about user behavior in online environments, and analyzing data collected from the Internet, relatively few have actually been conducted online.

Clarke (2000) has identified issues of importance in conducting research online, including the potential impacts of text-only interfaces, asynchronous communications, sampling issues, and ethical considerations. In another paper by Clarke (1998), email was used to conduct one-on-one interviews for a case study, in part to obviate the difficulties presented by participants who were widely dispersed geographically. Sharf (1999) used newsgroup postings as raw data for a study of online discourse, and found it prudent to take extra steps to insure that the material was both collected and used in a clearly ethical manner. Gaiser (1997) used email distribution lists created specifically for conducting asynchronous online focus groups to study social forms in cyberspace. Gaiser decided that since the research questions being pursued dealt with online phenomena, online focus groups provided the correct natural context. Waskul, Douglass and Edgley (2000) conducted a study which recruited participants from chat rooms, and collected data from one-on-one realtime interviews conducted online. They concluded that this plan was appropriate for their particular research context, which dealt with online behaviors, while at the same time recognizing limitations specific to the method. Ruhleder (2000) observed the texts produced by students in an online master's degree program as they participated in chat forums provided as 'virtual classrooms', and concluded that the distributed teaching environments "created new opportunities for capturing and analyzing interaction in the hybrid spaces that are becoming integral parts of how people, institutions, and communities organize their work and their lives." Notice that all of these studies have in common the fact that the data collected is in the form of text. While it is conceivable that in a broadband-enabled future, Internet telephony and video (teleconferencing) communications will become universally available and employed, at present the communication technologies most available and familiar to users are text-oriented. Facility with online text, particularly in real-time environments such as chat rooms, is thus by necessity the
norm for users of Internet communications. As we shall see later on, this focus on text has both advantages and drawbacks.

Largely because of the cost and convenience benefits provided by online communication tools, Internet-based realtime online focus groups have been exploited in the private sector by companies hoping to collect meaningful marketing data. In this context, they have attracted considerable criticism. Sinickas (2001), Edmunds (1999), and Greenbaum (1997) have pointed out what they consider the shortcomings of focus group research carried out online. Among their criticisms are the following:

- Lack of non-verbal inputs
- Loss of face-to-face group dynamics
- Difficulty of insuring attention to topic
- Limited role of the moderator
- Slower interactions -
- Participants have time to consider and edit their remarks while typing
- Participants, typing more slowly than they speak, contribute fewer words
- Difficulty of encouraging equal participation
- Screening - no way to insure the identity of the person participating
- Difficulty in fully exposing subjects to the desired stimuli (seeing, handling products)

Despite these caveats, Sinickas does recommend using online communications for persons who are difficult to reach because of travel distances or work schedules, rather than discarding them from the study altogether. Bryman and Bell (2003, pp. 502-505) also give this reason for using online focus groups, and further suggest that they may be useful for particular research topics. In our case, the research question of interest is participants’ ideas and beliefs about a specific type of online activity, the use of peer-to-peer filesharing systems. This approach is supported by Sweet (2001), who suggests that Internet use is a topic for which conducting the research online is appropriate.

3. Research context

The research program we are pursuing looks at the impact of file-sharing programs and digital media in general on the music industry, particularly as information technologies change both the behavior of users and the conditions of doing business for music content providers. This study is conceived as theory development research, as a follow-on to Hughes and Lang (2003), an analytical paper which identified, among other developments, shifts in power among the interested parties of the music industry, and shifts from centralized, hierarchical, rational processes to distributed, networked, emergent processes.

The project described below is a qualitative study, using data collected from online focus groups drawn from three targeted populations. The first consists of technologically sophisticated users of MP3’s, the second of industry experts and innovators recruited from a screened and monitored list server, and the third from an online forum of parents discussing issues raised by MP3’s as used by their children. The study thus depends upon theoretical sampling, as discussed by Miles and Huberman (1984) and Charmaz (2000). Further, the sampling method aims to maximize the validity of the data by using key informants as subjects (Green 2001).

Online focus group members are first identified as potential candidates from public postings, then contacted by email to request their help with the project. For this particular project, we have not had to resort to any additional incentives to get people to participate. Once a time for the session has been settled, participants are given dummy ID’s and passwords to an Internet site created on Blackboard© specifically for the purpose of supporting this research project. The ID’s and passwords give them sufficient access to Blackboard© to reach the ‘Virtual Classroom’, which is a common chat area. The session begins when all the group members have logged in, and ends when all of the questions have been discussed or when the participants need to leave for other commitments. A typical session lasts between 60 and 90 minutes. Since members are logging on with dummy ID’s created by the system administrator
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(Digimusic Participant1, Digimusic Participant2, etc.) they are essentially anonymous to each other. The moderator's screen name in this case is the actual name of one of the authors (a convention of Blackboard©, which is nominally set up for teacher-student interactions). In order to handle the monitoring and technical task load, which tends to be high, we have conducted sessions with both authors present at a single workstation, and only one moderator name in the chat area.

Our practice has been to approach each session with a prepared (but evolving) list of questions, each of which is used to kick off a round of discussion. Once the members have begun to contribute, the moderators ask focusing or follow-up questions, comment upon members' responses, or, when the progress of the members' chat postings is particularly swift and productive, passively observe. We have found that our list for this particular project requires no less than two and as many as eight minutes for each question, depending to some extent on the number of participants. Since our targeted sample is drawn from relatively fast-typing users who are highly familiar with online communications technology, the pace of postings on the screen is such that five members in a given focus group is likely the maximum that can be reasonably monitored, even with two moderators present at the workstation. This number is just below the 8±2 range recommended by Fern (2001), although Fern does note that the trend in the focus group industry is toward smaller groups. Once the session is over, the Blackboard© system automatically creates a dated transcript of the session, which can be reviewed online or exported to word processing and analytical software.

4. Using online focus groups

Edmunds (1999) and Stewart & Shamdasani (1990) both point out that focus groups are appropriate for exploratory research, in which qualitative rather than quantitative analyses are to be produced, in order "to provide an understanding of perceptions, feelings, attitudes and motivations" (Edmunds, 1999). The study described herein is such an exploratory study, intended to elicit the attitudes and perceptions of both industry experts and users towards digital music media, with an eye toward the possibility of facilitating the design of a quantitative study (Edmunds, 1999) later on. Greenbaum (1993), in his list of appropriate uses for focus groups, includes a category called "Attitude Studies", a collective term for several related purposes, one of which is "to determine consumer attitudes toward specific issues." In this case, it is attitudes which concern us, and we already have indications of some unexpected results which indicate that the music industry may be trying to address issues, by making major and costly technological changes, which are viewed by users are relatively unimportant. For example, one response of the music industry to the relatively low-quality MP3 music file format has been to introduce products with higher audio quality which the consumer cannot readily reproduce or redistribute, such as the Super Audio CD and the DVD-A (surround sound audio) formats. So far, all of our session participants have indicated, contra the industry view, that the lower quality of MP3 files is not important to them at all. There is already some quantitative research to support this notion (Bhattacharjee et al, 2003). If this response remains consistent as we continue to collect data, it would constitute an important finding with strategic implications for producers of digital media.

It is certainly true that online focus groups as conducted in text-only chat areas lack the media richness and social presence of face-to-face focus group sessions (Schneider et al 2002). However, in the few years that Internet communications have become widely accessible, substitute cues have been developed which are already to some extent standardized and familiar to experienced online users. We have found that emoticons [ :-), :((( ], typographical cues [!!!, ???? – See Figure 1 under participant D4], standard acronyms [IMO-In My Opinion], all-uppercase text [ 'NOT' – (See Figure 2 under participant D3), and interjections [ "whoa!"] are spontaneously introduced by group members to enrich the text-only experience. We do not assert that such workarounds make text-based chat the equivalent of face-to-face meetings; rather, realtime chat provides an experience and generates data which is
different from face-to-face, but nevertheless rich in its own way.

Greenbaum (1997) mentions 'group dynamics' as a factor which is problematic for online focus groups. While it is true that interactions among members in a text-based chat room are not identical to those of face-to-face groups, group interactions do take place online. Furthermore, at least one well-known dynamic, the domination of the discussion by one or a few members, is simply not possible online. Krueger (1994) and Fern (2001) dedicate portions of their texts on focus groups specifically to dealing with the dominant talker, who wastes limited session time by monopolizing the discussion. The chat room interface is, by virtue of its technology and interface alone, inherently democratic; every participant's 'voice' is guaranteed a hearing, without the necessity of waiting for an opportunity to jump in. Thus, persons who are for any reason slower to speak up in a face-to-face situation are at no disadvantage whatsoever in the online focus group. Krueger includes instructions for how moderators can handle "The Expert, the Dominant Talker, the Shy Participant, and the Rambler." The nature of the chat interface has given rise in our study to a different list of participant behaviors, which might be labeled:

- **Monologuing** - typing a series of posts on a solitary thread, without responding to others, and without their responding to him/her;
- **Dittoing** - contributing, but mostly by agreeing with others' opinions;
- **One-Liners** - statements with relatively brief content; the nature of the interface in Blackboard®, as well as in many other chat systems, encourages this type of participation, since the input section displays only one line of text several dozen characters long; Schneider et al (2002) found that comments of online focus groups were shorter on the average than those produced in face-to-face groups; however, this behavior is not universal, since we also have
- **Essays** - composing comments as complete paragraphs, consisting of multiple, orderly and grammatical complete sentences; the time it takes to conceive and type in these paragraphs means that the Essayist contributes fewer posts, but perhaps with deeper content than the One-Liner;
- **Challenging** - monitoring others' contributions closely, and disputing points of disagreement

Some of these tendencies can be observed in the analysis of parallel and multi-threaded chat conversation which appears in Figure 1. Note and compare the similarities and differences between this session, which included five participants and a moderator, and Figure 2, which charts the transcript of a session with three participants and a moderator.
Is the scale of copyright violations new? How dangerous has Internet piracy become?

very dangerous to the corporate oligopoly controlling the entertainment industry

the recording oligopoly in which just a few companies control 80% of global music production and distribution

I have no sympathy with major labels trying to enforce their market control

I provide my work with no reproduction restrictions because I think it is to my benefit that my work is distributed beyond my personal distribution system

it's only piracy if you are a corporation

what kind of oligopoly?

I think that artists need to be rewarded for their work

however our current copyright policy is obsolete and is no longer an effective mechanism to ensure this

however the industry has never been willing to discuss these seriously because it would result in a drastic weakening of their market control

I think they need to be rewarded but adding 20 years to the copyright length doesn't help artists make more material

the general public doesn't understand more than 5% of the copyright law, plus it varies internationally which is something to keep in mind when you download music

I think they need to be rewarded but adding 20 years to the copyright length doesn't help artists make more material

the general public doesn't understand more than 5% of the copyright law, plus it varies internationally which is something to keep in mind when you download music

i want to understand copyright law very well, the public fairly well.

exactly

nobody said there needs to be justice, that's the reason for the BIG change

i think i understand copyright law very well, the public fairly well.

nobody said there needs to be justice, that's the reason for the BIG change

the public doesn't understand more than 5% of the copyright law, plus it varies internationally which is something to keep in mind when you download music

nobody said there needs to be justice, that's the reason for the BIG change

In your judgment, can copyright law in its current or proposed form ever be enforced? What would be the consequences if enforcement essentially failed?

of course, the big companies had the means to control distribution before, because they had the studios and the presses. Now they don't.

is it inherently bad if someone has information or content that others would find useful or interesting, but they don't want to share it for free? do they have a right to make money?

Look at the software industry

the whole copyright paradigm ought to be re-addressed

everyone has a right to make money off their product, but maybe what is needed is a different way to benefit monetarily than the direct sale method we have now

they can't be enforced in their present way since there is no police force to go and arrest 5,000,000 people all over the world...it's a lost war from the beginning...

how do you think the general public does?

how can you believe you understand current copyright law, and how well do you think the general public does?

how well do you believe you understand current copyright law, and how well do you think the general public does?

How does that happen?

they don't get financially rewarded by record companies, they keep most of the profits

it is my understanding that most performers make most of their money on licensing sales and live performances

musicians make their money in selling tickets to their live shows and selling t-shirts and the record companies keep the profits of CD sales - where is the justice there?

In your judgment, can copyright law in its current or proposed form ever be enforced? What would be the consequences if enforcement essentially failed?

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In your judgment, can copyright law in its current or proposed form ever be enforced? What would be the consequences if enforcement essentially failed?
A critical and obvious difference between these charts and the transcript of a face-to-face focus group is the lack of linearity in the online focus groups. Conversations in text chat rooms can take place in parallel, with simultaneous threads initiated, diverged, converged, and terminated at the discretion of the participants. Thus no one need wait for their turn to speak and make an appropriate comment. In a face-to-face group, an apposite comment may occur to one of the members, yet never make it into the transcript of the session, because the flow of the conversation moved on to other areas before the participant had a chance to speak up. In this sense, contributions to an online focus group session are less time-dependent than they must be in the face-to-face environment: (1) Any thought can be posted immediately, with no need to take turns; (2) No comment need follow directly upon the immediately preceding one; participants can and do refer back and respond to earlier comments preserved in the system by the chat interface. For example, look in Figure 2 at D1’s eighth comment (“the copyright question is a good one...”). There are seven other comments intervening between this post and the moderator question to which D1 here responds. By
the time D1’s comment appeared, the original question was no longer on the visible portion of the chat record. Likewise, the monitor has this same powerful resource at his or her disposal, the 'instant transcript' nature of the chat system. Moderators can make note of important and fruitful topics and ideas as they appear, then refocus the session with follow-up questions at any time, with word-for-word or even simple cut-and-paste references to earlier comments.

The multi-linear nature of chat text enhances the completeness of the session, in that no potential contribution need be lost. It also poses challenges for the moderator who is trying to follow the session in real time. Keeping up with simultaneous parallel exchanges requires fast reading and close attention; we have found that two moderators can stay busy for the major portions of a session, even with just five participants, depending on how fast the participants type, and the nature of their contributions. The 'One-Liner' in particular can cause the screen to scroll at a fast pace.

Numbering also allows participants to refer easily to the point they wish to address—notice that this capability was utilized by participant D3 in Figure 2. By this time, we were also keeping a separate document window open with our list of primary questions ready to use. We are currently using copy-and-paste directly from this document to the chat interface to introduce new questions as appropriate, so that the time saved typing can be re-allocated to the construction of follow-ups and other tasks, such as logging the precise time of the posting of new primary questions. We are also considering implementing a Screen Motion Capture tool for the duration of a session, in order to preserve an even more complete record of the sessions, particularly with regard to timing.

Also apparent in the side-by-side comparison of Figures 1 and 2 is the differing proportions of vertical threads (following up one’s own comments) and lateral threads (responding to others). This difference may lie partly in the inherent tendencies of those participating (a Monologuist generates vertical threads, a Challenger generates lateral ones), but it may also be in part a factor of group size, since it is easier for a small number of participants to keep track of everyone else. As our study progresses it will be interesting to see if this emerges as a statistically significant effect.

The fundamental difference between these categories (One-Liner, Challenger, etc.) and those identified in Krueger is that the online types above do not necessarily constitute problems which must be solved by nuanced moderator techniques, because of the ability of the online system to handle multiple simultaneous threads of input. While the online moderator will indeed want to elicit more thoughtful contributions from the Dittohead, and perhaps address follow-on questions directly to the Monologist to draw him/her into the general discussion, the other three types, especially the Challenger, employ different communication styles which in our sessions have contributed positively to the data produced, each in their own way.

Realtime chat has the potential to be more conceptually “pure”, in that the participants’ opinions of each other can be based only on their contributions to the discussion. Thus, it is not possible for one
participant to unduly influence the others by virtue of his/her appearance, tone and volume of speaking, body language, or other cues which are always present in the face-to-face method. The group dynamics of chat rooms are, of necessity, based only on the participants' substantive contributions via the medium of text alone. So while lack of non-verbal cues can be disadvantageous because the moderators have less information by which to judge responses, it may also in this sense be beneficial.

Critics of online focus groups point out that it is not possible for moderators of online focus groups to be certain that the contributors are not simultaneously engaging in other activities unrelated to the topic. For marketers hoping to gather data on, say, consumers’ emotional reactions to a new car design, attention to topic could indeed be a real problem requiring intervention by the moderators. But a person in a chat room might, without fear of discovery, also eat lunch, search for MP3's, and check email. Indeed, it is in the very nature of multi-tasking computer systems for experienced users to engage in this kind of behavior. The argument could be made that a multi-tasking environment, far from being a negative characteristic, is the only natural setting for studies such as this one, whose topic of interest is some aspect of online behavior. And of course, it is not possible for a moderator, even in a face-to-face focus group, to know whether a given member is giving all his/her attention to the topic, or is also thinking about how tasty the provided refreshments are, considering what to do after the session finishes, or silently critiquing the haircuts of the other members. The question is not whether or not members are giving absolutely all their attention, but whether they are giving enough attention to provide sufficiently rich data to adequately address the issues of interest to the researchers.

The chat interface automatically provides an aid to keeping attention focused on the topic, since the text is captured and kept on the screen in front of each participant's eyes. Thus, it is not necessary for members to try to keep in mind what someone else has said 30 seconds, 3 minutes, or even 45 minutes ago; the entire record of the session is available at any time through scrolling. It is not possible to miss or misunderstand what someone else has said, because of poor hearing, or because more than one member was speaking at the same time, since each contribution can be read at leisure. The communication system itself thus acts as a perfect memory store of the entire discussion, which can only help in focusing members' attention.

Greenbaum (1997) is concerned that the moderator of an online focus group has more limited means at his/her disposal to "draw out quiet or shy participants, energize a slow group, and use innovative techniques that will delve a little deeper into the minds of participants." We have already discussed above the advantage of the chat interface in providing equal access for all participants to a non-monopolizable space. For a slow group, or one which has not provided sufficiently deep insights, face-to-face moderator techniques may not apply, but this does not mean that we are totally at a loss. Rather, the moderator simply needs an alternative set of skills, based on the possibilities and conventions of chat room communications. The experienced chat room moderator can employ the means at his/her disposal, including non-standard uses of text such as emoticons, in order to bring the session activity to the desired level.

Furthermore, text-based realtime chat communications may provide special advantages over face-to-face meetings for some types of topics. It has been noted that users of online communications systems are in some cases likely to be more rather than less forthcoming online (Walston and Lissitz 2000; Murray and Sixsmith 1998). It is possible that this effect derives in part from the shield of anonymity afforded by the technology. In his study of the practices of criminal drug dealers, Coomber (1997) went to online methods specifically for this reason. In our case, the topic of file-sharing systems and MP3 files raises issues of unethical and possibly illegal behavior, issues which our subjects may be more comfortable discussing in the familiar environment of their own room/office and personal workstation (the same environment, by the way, in which the questions of ethics and illegality are encountered, and decisions about them made) and behind the anonymizing chat interface, than they
would in the ‘interrogation room’ of a face-to-face focus group session.

Research on Group Support Systems have in the past made a distinction between anonymous and non-anonymous systems, and between co-located and spatially distributed systems (Nunamaker et al, 1997), but not between, let us call them, 'Host-located' and 'Participant-located' systems. A participant-located system would be one in which a focus group member could take part from within a space he identifies as his own—a space and a machine which he or she is familiar with, controls, and perhaps owns (O'Connor and Madge, 2002). As sophisticated digital communications tools migrate from specialty hardware and software to common user platforms, it is likely that this distinction will be one worth making. Notice that face-to-face focus groups are universally, of logical necessity, Host-located. It is not possible to conduct a face-to-face group in which each member is comfortably situated in their own home. If the space in which the focus group interaction makes a difference, and we believe that it can, then the online focus group has the greater flexibility. One could conduct such a group by inviting members to use the host's machines in some sort of laboratory setting, or have them participate from their own computers at home. In fact, a direct comparison of these two online interview modes would constitute a basis for isolating the 'Participant-located' effect, if it does indeed exist.

It is certainly true that even fast typers will contribute fewer words online than they would if they were able to speak. However, it is not safe to assume that more always means better. Nor is it necessarily the case that instant, spoken reactions are always better than thoughtful, typewritten and possibly pre-edited replies. The style of the One-Liner, by the way, approaches Sinickas' (2001) ideal of an instant response. For a marketing company gathering data on consumers' emotional connection to a brand-new product, no doubt the instant, unedited responses are required. Our study, however, does not introduce anything that is new to the participants; our goal is to discover what issues are important to the stakeholders in the digital music world, and in what way. For research of this type, carefully considered replies on complex issues also provide useful data. One of the cues we have used to make a decision about moving on to the next question was when the posts in response to the previous question began to repeat content, or slow down substantially, indicating that the members had already had their say on that particular question. Finally, the reduction of content due to the requirement of typing replies is offset to a considerable extent by the fact that online, all members can be typing and posting at once. Five medium-speed typers can easily equal or even surpass the word rate of a single (face-to-face) speaker. At times when the give-and-take in our online focus group sessions was most lively, it was all we could do to speed-read the posts as they scrolling by on the screen. The total output from five different simultaneous contributors, all brainstorming the same question, and all captured in an instant, error-free transcript, has the potential to be even more useful than the same volume of data from only a few dominant speakers.

There is no way to utterly insure that the persons on the other end of the chat connection are who they say they are. For studies in which individual identity is crucial, face-to-face sessions are definitely a necessity. However, not all research projects have this requirement. In our study, we do not have any requirement for confirming personal identity; in fact, just the opposite—we have deliberately employed anonymity as a feature of the communication medium, in order to encourage members to be as forthcoming as possible. Even face-to-face sessions are not totally immune to this problem; extensive and time-consuming background checks would be necessary to confirm all of the demographic data which participants provide. Markham (2004) makes the subtler point that meaning and identity are socially constructed in any context, not just the Internet. The difference is that Internet communication isolates and focuses this process of negotiation in the single medium of text. Non-verbal cues may have a downside as well. Markham further points out that "we use physically embodied features and behaviors to make categorical assessments of consensual partners" and that "a priori assessment based on typical/traditional gendered, ethnic and
socioeconomic categories remains a problematic feature of social research."

It is hard to imagine how high-quality marketing research on physical products could be ever be collected via online communications, even if we assumed very high quality images, video and audio. The gestalt of sensory impact of a new product is simply not digitally transferable. The use of online focus groups should thus be reserved for research interests which deal with intangibles, such as questions of policy or culture, studying attitudes, beliefs, and values, or with the digital world itself.

The following table lists some of the features of online focus group communications which have come to our attention during the progress of the study, as they relate to the criticisms of Sinickas, Edmunds, and Greenbaum mentioned earlier:

<table>
<thead>
<tr>
<th>Criticism</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of non-verbal inputs</td>
<td>Substitute Cues: emoticons, typography, acronyms, case, interjections; Non-verbal judgments have pros and cons</td>
</tr>
<tr>
<td>Loss of face-to-face dynamics</td>
<td>Elimination or reduction of dominant talker, shy participant, and rambler problems</td>
</tr>
<tr>
<td>Difficulty of insuring attention to topic</td>
<td>Multi-tasking is natural mode of online activity; may be appropriate for research into online behaviors</td>
</tr>
<tr>
<td>Slower interactions</td>
<td>Users may contribute freely at any point without waiting; Chat interface provides perfect session memory</td>
</tr>
<tr>
<td>Participants contribute less</td>
<td>Parallel, simultaneous threads increase total output</td>
</tr>
<tr>
<td>Participants can edit their remarks while typing</td>
<td>But don’t necessarily do so (quick One-Liner); May be desirable for some research questions</td>
</tr>
<tr>
<td>Limited role of moderator</td>
<td>Different skill set, modified role; Chat interface provides perfect session memory for follow-ups</td>
</tr>
<tr>
<td>Difficulty of encouraging equal participation</td>
<td>Moderator uses alternate means of stimulating discussion; Chat system encourages more participation—no need to take turns</td>
</tr>
<tr>
<td>Difficulty of insuring the identity of participants</td>
<td>Depends on how participants are recruited; Authenticity is always negotiated and situated</td>
</tr>
<tr>
<td>Difficulty in exposing subjects to external stimuli</td>
<td>Impact varies depending on research question; Multimedia objects can be presented to group</td>
</tr>
</tbody>
</table>

5. Benefits

Clarke's excellent review of the Internet as a medium for qualitative research (2000) discusses the practical and economic benefits of carrying out research online, which are considerable. This was one of the motivating factors behind our decision to conduct online focus groups, particularly given the nature of our theoretical sample. The populations we wish to use as subjects are already online, where participation in virtual communities is independent of geographic location. Assembling industry experts for focus groups, for example, would have involved enormous expense compared to online meetings, were it possible to get them physically together at all. When costs of travel, meeting room space, technical equipment and support for recording, and transcript preparation are factored in, the difference between face-to-face and online focus groups can involve orders of magnitude. Sinickas (2001), even while arguing generally against online focus groups, cites cost and convenience as reasons to use them.

One major task inherent in face-to-face focus group research is the preparation of transcripts. Audio recordings can vary enormously in quality, depending on whether analog or digital media are used, on the microphone types and setup, and whether the participants speak loudly enough in the direction of the microphones to be captured. Even given adequate audio gear (which is expensive), the transcription step itself has the potential to lose or distort content from the face-to-face session. Mergenthaler and Stinson (1992) discuss the procedures necessary to insure that the transcriptions are as accurate as possible. The principles they set forth are:

- Preserve the morphologic naturalness of transcription. Keep word forms, the form of commentaries, and the use of punctuation as close as possible to speech presentation and consistent
with what is typically acceptable in written text.

- **Preserve the naturalness of the transcript structure.** Keep text clearly structure by speech markers (i.e., like printed versions of plays or movie scripts).
- **The transcript should be an exact reproduction.** Generate a verbatim account. Do not prematurely reduce text.
- **The transcription rules should be universal.** Make transcripts suitable for both human/researcher and computer use.
- **The transcription rules should be complete.** Transcribers should require only these rules to prepare transcripts. Everyday language competence rather than specific knowledge (e.g., linguistic theories) should be required.
- **The transcription rules should be independent.** Transcription standards should be independent of transcribers as well as understandable and applicable by researchers or third parties.
- **The transcription rules should be intellectually elegant.** Keep rules limited in number, simple and easy to learn.

Notice that for online focus groups all of these principles are either automatically handled (first three from the list above), or simply do not apply (last four). The only caveat is that researchers should take care to use software which captures automatic transcripts. Most packages we examined for possible use had this capability.

McLellan, MacQueen and Neidig (2003) discuss at some length the central problem of transcription for qualitative research, which is the imperfect link between the session itself and the transcript. A great number of decisions, extending all the way from technical procedures to semiotics, must be faced for researchers making transcriptions from audio tapes, with the result that, "despite all best intentions, the textual data will never fully encompass all that takes place during an interview." They cite Ashmore and Reed (2000) to make the point that the audiotape is a "realist" object, while the transcript itself is a "constructivist" one.

For online focus groups, these categories do not exist separately. The substance of the online focus group session as it is being conducted is itself text, and constitutes the transcript of the same, whose usefulness begins instantly, as the members read and review the text on the screen while considering and making their online replies. For studies such as the one described here, in which the participants are highly experienced and comfortable with online chat, and thus confident in their ability to express their ideas in realtime text, the automatic transcription feature is a valuable and greatly simplifying aid to the research process.

Briefly put, the transcript of a face-to-face focus group is never 100% accurate; the transcript of an online focus group always is.

### 6. Limitations

An online focus group session is totally dependent on the information technology employed. Unless everyone can get logged in and functioning reliably, you don't have a session. One attraction of the Blackboard© system we have used is the maturity of the software—this is not a new and possibly buggy release. Given the wide variety of user platforms on the Internet, it is likely wise to be highly conservative in the technological requirements you impose on your subjects. One reason that we have experienced minimal technological problems so far may be that our theoretical sampling method deliberately targets highly experienced and technologically savvy subjects, who can be expected to be reasonably up to date in their choice of hardware, software, and Internet connection. Our sample population choice may also be responsible for the fact that though the Blackboard© login process involves several clicks and is not necessarily obvious, none of our participants has had any trouble going straight to the correct chat area.

One cue which is handled automatically and intuitively in face-to-face situations, but not online, is the timing of comments. In some trials which involved one-on-one interviews, we experimented with typographical cues which would let us distinguish between times when we were waiting for subjects to finish typing a
response and times when they were simply waiting for the next question. This sort of thing is obvious when the medium is actual speech, but not when text is used. For sessions with four or five members, significant "dead air" time was generally not a problem, as the posts simply continued to flow in for the duration of the session. It is not inconceivable that future versions of chat software will provide visual cues to make this distinction automatically.

Without making any specific quantitative claims, we have noticed that some sort of "chat room fatigue" can set in after about an hour. This may be due to the workload of continuous reading and typing in a fast-moving chat session, or more generically the mental exhaustion of exploring a single topic in concentrated detail—after awhile, people may simply be ready to do something else. As Greenbaum (1997) points out, the moderator of the face-to-face session has more options to revivify the session than does the online moderator.

To summarize limitations mentioned earlier in the paper:

i. Online focus groups are likely to be more appropriate for research topics involving online issues, ideas, and behaviors, and less appropriate for studies requiring non-computer related stimuli, such as marketing research on new physical products;

ii. Online focus groups do not allow the production of notes logging non-verbal behaviors such as nodding, yawning, frowning, etc., which may be of interest to the researchers;

iii. Moderators cannot enforce full participation of all members of an online focus group; to some extent we must rely upon the goodwill and good faith of the participants, as well as, in our case, their engagement and interest in the topic;

iv. A well-monitored online focus group likely cannot be as large as a face-to-face group, which can include as many as 10 persons; even with 5 members, some things may be missed when all participants are continuously posting at once in parallel and the chat screen is scrolling swiftly;

v. Online focus groups are likely to be more appropriate for studies in which the subjects are themselves comfortable with the technology, so that typing speed, logon navigation, and other procedural issues do not interfere with the flow of ideas;

7. Future directions

At this early stage in the development of Internet research tools, many open questions remain for the conduct of online focus groups:

- **Optimal Group Size** – Mann and Stewart (2000) suggest that the maximum number lies in the area of six to eight participants; for the fast typing, highly experienced Internet users who seem to be prominent in our sample group, even this number may be too high;

- **Optimal Group Composition** – for our study, we have so far found it productive and stimulating to the session to include members on different sides of the sensitive issue of music filesharing; other strategies may also have benefits;

- **Optimal Session Length** – this will likely vary with the size of the group, the particular topic(s) under discussion, and the interest of specific participants;

- **Optimal Time Allocation Per Question** – at some points in our sessions to date, we have had to make choices about pursuing promising follow-up questions, or moving on to new areas in the interest of obtaining sufficient coverage in the time remaining;

- **Best Strategies and Guidelines for Facilitating and Moderating a Session** – for a hot issue like music filesharing, we have often found the discussions to be largely self-sustaining, particularly in the larger groups, once a question is put forward; one concern is how to introduce all the research questions we feel need to be covered without appearing to be constantly interrupting or cutting off discussion;

- **Place Effects** – would participants' contributions to the online focus group differ significantly if the session took place using workstations in a laboratory setting,
instead of on the users‘ own computers, and if so, how;

- **Single/Multiple Moderators** – so far, we have consistently used two researchers sharing a single online presence; other combinations might improve the sessions, such as having a separate online ID for each of two moderators;

- **Data Collection** – what quantitative data might be of interest, and how could it be captured; we are exploring ways of recording question and response timing, and volumes of participant output per unit time, for the possibility of comparison to face-to-face sessions;

- **Time Effects** – need all participants be in the same or close to the same time zones? – what happens when time zones are widely separated;

- **Member Interaction** – in our sessions, as is evident from Figures 1 and 2, these are plentiful and vigorous; how might these intra-participant exchanges be encouraged or managed in order to facilitate the most productive sessions;

We expect to gain some insight into many of these areas as the number of completed sessions increases. In order to generate some revealing and rigorous findings, one possibility is to collect data for quantitative comparisons between online and face-to-face sessions. Pertinent questions raised by critics of online focus groups include the volume of output, the numbers of issues raised and quality of comments, and the equality of participation (or lack thereof) between different participants.

We have included in this paper sample analyses from only two sessions, so it is far too early to draw any definitive conclusions. The significance of this exploratory research for us at present is the questions raised by the actual practice of online focus group communications, and the identification of fruitful areas for further exploration. Are online focus groups an effective method for qualitative research studies? We believe that for the right research questions and contexts, and with the right application of available online communications technologies, indeed they can be.

**References**


Green, E.C. (2001) "Can Qualitative Research Produce Reliable..."


Perspectives on Management Research Design and Orientation: Quandaries and Choices

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Abstract: The purpose of this paper is to discuss some of the quandaries or difficult choices that affect detailed research design as well as the ‘big’ orientations or paradigms that motivate studies in the field of business and management research. Many of these choices and decisions are now commonly assumed to be mere preferences, no longer worthy of debate. As in the case of whether to collect data that is say, more easily quantified than qualified. Or whether the demands of practice are incommensurable with those of the social sciences. Such oppositions and tensions are discussed here in the context of recent surveys of managerial work.

Keywords business and management research, credibility, incommensurability, quantitative, qualitative

1. Introduction
Within the past twenty years or so there has been an exponential growth in advice and assistance to researchers and students in the field of management research (see for example, Lyotard, 1986). Whilst the many textbooks and articles on experiences in practice are to be welcomed, there is a downside to this wealth of information. For instance, it can become all too easy to forget the limits of particular research methods when the focus is on scholasticism or the details of their associated techniques. This may be especially problematic if it is assumed that the selection of one or other method is a function of mere preference. To illustrate the significance of some of these inherent problems- the extent of current quandaries and choices- comparisons are made here between data gathered through the two media of a) mail surveys and b) face-to-face interviews. These comparisons focus on the following aspects and oppositions:

- General concepts of ‘quantitative’ and ‘qualitative’ research as they have limited and facilitated the surveys, even though many now assume this to be a defunct debate (see for example, Giddens, 1984).
- Differing requirements for ‘structure’ and ‘process’ in the design of the surveys.
- Contradictory and confirmatory values, attitudes, needs and expectations of a) overall research orientations; b) the researchers engaged in the studies; and c) those that took part in the surveys. This is with a view to reconciling differences, which others argue may be incommensurable (see for example, Hassard and Kelemen, 2002; Jackson and Carter, 1991).

The surveys are with reference to recent Management Research Centre (MRC), Telford projects, which are briefly as described below. Taken as a whole the investigations consider, or are rather an ambitious attempt to re-consider, take stock of and debate the current realities of managerial work at the beginning of the new millennium. Over a four-year period, the MRC undertook a large-scale longitudinal study of managers’ experiences of ‘change’ using conventional anonymous mail responses (Worrall and Cooper, 1997-2001). Three years later, this was followed by a series of in depth face-to-face interviews with some fifty executive and senior managers in large organizations and institutions (Jones, forthcoming 2004; Worrall and Jones, forthcoming 2005). This research was further supplemented by a number of commissioned surveys in local authorities. Reflections on the limits and benefits of these researches have provided a useful reminder of those aspects that tend to be taken-for-granted or readily accepted as intrinsic to the processes.

2. Surveys and quantified versus qualified evidence
By word definition, ‘quantitative’ expresses ‘bigness’ or ‘largeness’ with expectations
of specified amounts or sums in methods of analysis and data collection. Similarly, and in contrast, ‘qualitative’ suggests ‘what’, ‘what kind’ and ‘who’ defines the data and the methods by which they are obtained. Yet, paradoxically in practice, in research designed to be verified quantitatively—strong on facts and figures—it is easier to characterize elements qualitatively than it is to assess them numerically. As regards qualitative research evidence, the reverse holds true.

In gathering data for studies in management research where evidence is to be quantified, ‘what is going on’ in organizations, for example, is readily captured in single categories. Such concepts as ‘motivation’, ‘leadership’ and ‘management style’ are employed without too much concern to unpick the complexities of meaning of the selected phenomena before going on to devise intricate metrics in attempts to measure them. The usual measures as ‘strong’, ‘weak’, ‘authoritarian’ and the like tend to be perhaps surprisingly imprecise and highly qualitative given the mathematical rigors they are subjected to in the course of subsequent analyses.

Reflecting on these limitations, it could be argued that in general, anonymous response surveys take advantage of the Wittgensteinian notion of ‘meaning-in-use’. This is the idea of assuming a common, non-technical, non-specific understanding of words simply to track trends or patterns of usage as in the surveys under discussion here. Respondents in this case were asked to categorize perceptions of ‘management’, for instance in the questions of ‘management style’, as either ‘authoritarian or consensual’. By using such extreme response alternatives, it was possible to track the primary concern, which was ‘change over time’, as experienced by the selected panel of managers. Whilst it was not possible to declare, what percentage is authoritarian or that managers in the public sector are more or less authoritarian than those in the private sector, the mapping of sets of polar constructs have shown some interesting patterns.

2.1 Validity

To give a flavour of some of the quandaries in research design and administration, ‘face’ and ‘construct’ validity and are compared. The former is an estimate of whether ‘on the face of it’ the audience for whom it is intended will take the instrument seriously.

The latter is a measure of the extent to which individual items encapsulate complex concepts or traits. In terms of these criteria, mail surveys appear strong on face validity based on the response rates (1,362 in 1997; 1,313 in 1998; 1,213 in 1999; and 1,516 in 2000) (Worrall and Cooper, 1997-2001), but considerably weak on construct validity as a measure of the particular trait, say, of managerial style (see figure 1). Even had the respondents been offered a wider range of styles between ‘authoritarian’ and ‘consensual’, together with descriptors of behaviour, ‘managerial style’ in practice is probably rarely, if ever, a permanent disposition.
Q1 **STRONG FACE VALIDITY (SVF) / WEAK CONSTRUCT VALIDITY (WCV)**
MAIL SURVEYS (SVF) because of scale and perceived authority
WCV because the constructs are often heavily reliant on “borrowed” measures obtained for some other purpose

QII **WEAK FACE VALIDITY (WVF) / WEAK CONSTRUCT VALIDITY (WCV)**
MAIL SURVEYS (WFV) because of questionnaire overuse and ‘fatigue’
INTERVIEWS (WCV) because the time limit may prevent sufficient opportunity to probe constructs

QIV **STRONG FACE VALIDITY (SVF) / STRONG CONSTRUCT VALIDITY (SCV)**
INTERVIEWS (SVF) because of perceived authority. Content can be readily adapted to a given situation and (SCV) because the live process enables interviewers to tap into designated constructs

QIII **WEAK FACE VALIDITY (WVF) / STRONG CONSTRUCT VALIDITY (SCV)**
INTERVIEWS (WFV) where interviewees perceive a lack of credibility in the the interviewers
MAIL SURVEYS (SCV) unlikely where constructs assume a constant, closed clarity resistant to ambiguities and evolving understandings

**Figure 1:** Examples of mapping face validity and construct validity for mail surveys and interviews

Insofar as qualitative studies are concerned, although the main interest is in understanding concepts such as ‘motivation’, ‘leadership’ and ‘management style’, it is a simpler matter to log, code and count up apparent reoccurrences of phenomena, say instances of ‘autocracy’, than it is to explain them in some non-self-referential way. Contemporary approaches to grounded theory illustrate the practice of trying to qualify concepts, for instance, mainly by measuring typical extents to which they are employed. Often ideas of saturation are used. In other words, privileging similarities of responses over rare, individual insights.

To avoid this dilemma, aspects of the interviews were not only coded and categorized. Each face-to-face encounter was also viewed as a single case study and moreover, as one to which the researchers were given privileged access. This was not merely as observers of symptoms but as experiential participants in collecting unique accounts, both theirs and those of the researchers. Probably worth noting here in terms of designing and conducting credible interviews is that the interviewers are experienced managers.

Thus it has been possible to benefit from both clustering and mapping responses towards formulating new theories, as well as picking up on rich new research leads. A number of these are shared below.

3. **Surveys and ‘structure’ versus ‘process’**

Professor Cooper (1999) reminds us of the distinctions between ‘process’ - and interestingly, the inseparability of ‘structure’. For the purposes of the discussions here, ‘structure’ is about stability or quasi-stability, ‘process’ about change. To separate out ‘structure’, the tendency is to understand it when it is part of a process such as organization and to appreciate ‘process’ only when it is subjected to some form of structure.

Thus in the interviews referred to above, the researchers are confident that they would probably not have observed the behaviours worth noting had they a) merely asked the respondents for their informal opinions without the structure of a formal interview; or b) so structured the interviews that they may as well have given the interviewees questionnaires. Take the case of the liberating effects on the researcher and the researched. There is a strong belief that these materialized because interviewees and interviewers allowed the interview structure to temporarily disintegrate so as to become immersed in the benefits of ‘pure’ process.

When this was achieved, the interviews became an authentic, relaxed, trusted, sharing of views. Where it did not happen, as in the situation of ‘rehearsed’ interviewee responses (which became
apparent after four consecutive interviews with senior executives in one organization), the interviews emerged as both pointless and pointing. As unwitting players in a game, the researchers were left feeling irritated with the stage-managed interactions. However, on reflection there was a sense of having been party to curiously rich observations on the particular organization. Negative effects also occurred when the interviewers asked questions on aspects of ‘change’ that appeared to require second-hand information or over-stretched the respondents’ experiences in some way. These however only temporarily disrupted the interview process.

With regard to the mail surveys, the direct questions on ‘change’ give no indication of comparative magnitudes of ‘change’ or its implications for the anonymous individual respondents. This is a limitation of the structuring of a survey. Surveys usually enable researchers to test only one dimension of the selected sample’s opinion. Although in the case under discussion, this method enabled the researchers to single out highly significant findings. For instance to gauge the number of managers who had been party to ‘change’, which in any one year was some 60% of those who took part in the study.

It was, however, only through the deep, person-to-person interviews, that it was possible to explore some of the other dimensions of this ‘change’. The widespread prevalence, for instance, of a ‘me-too’ phenomenon emerged through discussions. Repeated large-scale changes are being introduced, for example, only because competitors are outsourcing services, locating offshore call centres or instituting other major reorganizations. Not to follow the trend, it was suggested, would be more closely questioned in a climate where perceptions of success are so closely allied to stock market performance.

4. Surveys and differing views on management research

In figure 2, certain contradictory motivations for conducting business and management research are counterpoised. To avoid a complex controversial debate into theories of incommensurability, the focus is on two specific aspects. First, the discussion centres on some of the implications of ‘buying in’ to the authority of the different paradigms. Although relatively simplistic paradigms are presented, the patterned approaches associated with each can have a profound influence on survey design and process. Second, the consequences of such approaches are considered. In particular, the interest is in the researcher views of those that take part in the research. There is also the wider effect of each research orientation on the other three paradigms, as well as on the research community as a whole. For the purposes here, incommensurability is taken as the absence of common standards (values, attitudes, needs and expectations) in business and management research.

I Consultancy approach

The overriding espoused value is objectivity, typified by such ‘externalities’ as the consultant, the manner of the investigation and the presentation of the findings (see for example, Worrall et al., 2003). Impressions management is likely to be as important as the findings. Hence, therein is the danger of compromising integrity. This may be in attempts say to meet client expectations and to underplay politically sensitive ambiguities, controversial issues in the study, or to be pragmatic about what the research is likely to contribute to the field of management research (see for example, Collinson, 2004). Published references may be more important than researcher insights. Relationships tend to be transactional, determined by what the client can afford to buy in terms of services, which are likely to be menu-driven or an algorithmic approach rather than bespoke. Attitude is measured in terms of the consultant’s fitness for the purpose of the research, usually based on professional qualifications, academic standing and past experience of projects of similar scale and type. In terms of client-consultant expectations, time and budgets form the essence of the contract. For purposes of credibility, the consultant in this mode generally adopts and maintains a detached ‘professionalism’. This detachment tends to extend to the human subjects studied where they are liable to contribute only as a collection of objects of interest.
**RESEARCHER’S ORIENTATION**

**INSTRUMENTAL**

<table>
<thead>
<tr>
<th>OUTCOME FOCUSED</th>
<th>I CONSULTANCY APPROACH</th>
<th>II INSTRUMENTAL ACADEMIC RESEARCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest in primarily achieving a brief within client-consultant negotiated budgets and time frames. Research tends to be commissioned to meet legislative or similar requirements.</td>
<td>Interest in the subject matter but the research is a means to an end or only to obtain, say a qualification or to contribute to a curriculum vita.</td>
<td></td>
</tr>
</tbody>
</table>

**APPECIATIVE**

<table>
<thead>
<tr>
<th>PROCESS FOCUSED</th>
<th>IV ACADEMIC RESEARCH PRO BONO PUBLICO</th>
<th>III CO-CONSULTANCY APPROACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest is not only in the topic but also in the grounds that justify the research and its findings. Knowledge and know-how have intrinsic values.</td>
<td>As in consultancy approach I, but the process is given careful attention. Both client and consultant desire to achieve results that ‘better’ a given situation.</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 2:** Examples of differing researcher values, attitudes, needs and expectations of management research.

**II Instrumental academic research**

Typically associated with career researchers and this includes students. A secondary value of the research is its usefulness, which in general is closely subject to the value judgements of others (research sponsors, editors, symposium organizers, academic standards). As such, the research is willingly tailored to particular requirements. The ideas, skew and presentation are wide open to negotiation. Ownership of the research may be relatively unimportant. This may lead to an unemotional distance between the researcher, the process and the findings. The primary value is the status or opportunities the research affords the researcher through recognition, publications and qualifications. Human subjects researched contribute as a means to this end and are treated in accordance with the protocols and expectations of specified research approaches.

**III Co-consultancy approach**

Consciousness is an important value in seeking to create meaningful changes. To bring in an outsider, or appoint insiders to raise consciousness levels within an organization requires a carefully navigated relationship between ‘client’ and the consultant, who is likely to be valued for particular personal attributes. The interventions can be of various types from mentoring internal change agents to facilitating change processes through action research. The concerns are not to so alienate those affected as to jeopardize the change. Here the consultant walks a fine line between maintaining and altering power relationships in pursuit of some future (improved) organization (see for example, Jones, Baldridge and Worrall, 2004). The value for the research subjects...
participating in the research is high risk, because it can only be measured in terms of the eventual outcomes.

IV Academic research pro bono publico

The desire is to study the social world in-situ as it were. Knowledge is of value for its own sake. Pro bono publico, for the public good, does sometimes describe professional (medical, legal) services given free of charge. The explicit freedom/goodness/publics here, however, are the activities associated with authenticity. Authenticity implies genuineness and the spirit of generosity, the qualities that seem to transcend political intrigue, contrivance, resentment and expedience. In research terms, this probably means producing ‘good’ research that generates more ‘good’ research. The research that is likely to enrich the community of business and management researchers through fellowship and credible studies. In so doing, to generate knowledge that might be expected to benefit wider society. Dissemination of this knowledge tends to be through the classic teaching process, seminars, conferences, working papers, peer review and the publication of textbooks and monographs. The driver for such research may be a deeply felt need or volition that is difficult to articulate except through the research. There is likely to be a collegiate expectation of a corresponding deep concern (ethical, moral, affective) for those participating in and informing the research, who perhaps benefit intrinsically from the involvement (making their views known for instance). As such, traditional academic research stands as a challenge to the other three approaches, which are more intent on external aims- adjusting the status quo, making improvements, and so on.

5. Conclusions

As the above has attempted to illustrate, highly intellectualised debates are not needed to surface the many quandaries and tensions contemporary researchers face within the field of business and management research. For, although the demands on us as researchers may be complex, the ‘big’ choices appear relatively straightforward. The decisive factors seem as likely to depend on professional ambitions and/or comfort zones as they do on inherent paradigm criteria. The latter criteria that come with the territory as it were: the established values, attitudes, needs and expectations of particular research protocols and methods. If there are issues of incommensurability, these are probably more closely allied to personal moralities and research orientation than research design. For instance, regardless of one’s preferences for a particular approach, one can readily accept that anonymous surveys and in-depth interviews measure differing aspects of say, managerial work. That in the interests of ‘good’ research—given its multiplicities of meanings—the requirements for data presented as statistics (see for example, Moser, ) are probably as valid as those for case studies (see for example, Yin, 1994). That said it might be more difficult to ‘buy into’ or exploit opportunities that do not easily mesh with deeply held views. Whilst the community of business and management researchers embraces a broad affiliation to very different design philosophies, methodologies or approaches to research, it is, nevertheless, held together by what appears as a common integrity. Personal beliefs about what constitutes ‘good’ or worthwhile research in the sense of grand, or even not so grand paradigms. The collective integrity that has structured the discipline, integrated the community and influenced its standing thus far in academia, the world of business and society. It would seem therefore that all work done in the name of business and management research has the potential to manipulate wider perceptions and hence the credibility of the discipline, its study and practices. For this reason, the quandaries and ‘big’ decisions about what to research, how to design and conduct this research, whom to research, appear as much an individual as a communal responsibility. Similar obligations would seem to apply in the training of new researchers given their future contribution to sustaining business and management research as an important branch of learning.

References


A Researcher’s Dilemma - Philosophical and Methodological Pluralism

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Abstract: In many research textbooks the distinction between qualitative and quantitative research is inadvertently linked with philosophical perspectives. This in essence creates a mutually exclusive relationship between method and philosophy. Initially researchers are led to believe, from these textbooks, that research is neatly divided into mutually exclusive categories, these being quantitative and qualitative research and ‘never the twain shall meet’. This divide is further strengthened with the inference that the relationship extends further; associating deduction with quantitative methods and similarly induction with qualitative methods.

What happens in most texts is that qualitative research methods and quantitative research methods are set against each other as polar opposites. (Crotty 1998, p19)

This paper argues that methodological pluralism is acceptable but what is not acceptable is philosophical pluralism. By naively linking methods and approaches to specific philosophy researchers and students may miss out on potentially innovative or creative data collection methods. Alternatively and more importantly by feeling tied or constrained by their philosophical stance to particular methods and approaches, associated with them by textbooks, they may in fact reduce the credibility, validity, and or significance of the research. There maybe an elective affinity between certain philosophies and methods but this should not necessarily constrain the methods chosen.

Keywords: Methodology, Philosophy, Pluralism, Qualitative and Quantitative Methods

1. Introduction
In this paper the focus is placed on exploring the nature of pluralism in research as it may be applied methodologically and philosophically; and suggests that what is needed is a refocus or thought in terms of a ‘hierarchy of research needs’; based on the level of study undertaken. Initially the variety of research approaches are identified together with the research methods, which are aligned to them. This then creates the opportunity to discuss the relationship between theory and method, as part of the research process. This also raises the issues surrounding the expectations of both academics and students involved in research, can vary dramatically; not least in the latter’s ability to understand, interpret, and engage successfully in the philosophical and methodological debate expected of them within their programme of study.

2. Initial problem
The misalignment between methodological pluralism and philosophical pluralism is an important issue for debate amongst research students, yet it is rarely investigated. This misalignment, between method and philosophical stances, can create confusion throughout the whole research process. By linking quantitative and qualitative research methods with the understanding and interpretation of philosophy (positivism and interpretivism) the research process becomes a quagmire often too difficult for many researchers or students to fathom successfully, given the number of other constraints they face ranging from lack of time, intensity of programme, through to willingness to engage with the literature.

The result of this confusion is that researchers and students remove themselves from the theory and tend to carry out the research they initially set out to achieve. They then construct a form or set of words that they think justifies the research they have carried out. This then creates a situation where the justification for carrying out the research becomes weak and highlights the fact that they (the students or researchers) do not really understand why they have done the research in the first place. Therefore the credibility, accuracy, relevance and rigor of the research may become questionable. This inevitably detracts from the whole research process both in terms of the individual piece of research and within the research discipline.

This non-rational alignment between methods and philosophies and the
debates surrounding them creates a situation where students and researchers remove themselves from the difficult discussions and tend then to follow and use methods, which they have previously encountered. One such example of this could be the term ‘empirical’ in both its use, and its relationship to philosophy. Often this term is taken to mean ‘numbers’, or ‘the facts’, and is used this way by empiricists. Many students, at a simplistic level, would also relate this term directly and purely to quantitative methods. The term empirical can be taken to mean ‘evidence drawn from concrete situations’ as opposed to arguments developed either from purely theoretical bases or from experiments (Mutch 2004). Therefore it is possible to use empirical work within a social science context; which according to many texts is interpretative and placed at the opposite end of the research spectrum.

However, many students and researchers take terms they have seen elsewhere and include them within their research without fully understanding them or the implications they have on the research process. This naivety may suggest a reason for many quantitative methods being used in the social sciences, to the exclusion of qualitative methods. This is not initially a problem but does create problems when the methods are incorrectly or inappropriately used because of the researchers or students limited understanding.

The use of other approaches (quantitative methods) within the social sciences may come from the fact that natural science methods appear to be so successful in their field of use (Yates 2004).

Sayer (1992, preface) argues that sadly many social scientists can still only think of ‘method’ in terms of quantitative techniques.

However, in not fully appreciating the relationship between the philosophical debates and methods used within the research process students and researchers run the risk of misaligning and misinforming their readership.

3. Reflectivity on my current research

This relationship between philosophy and methods has caused much anxiety and thought provoking discussions within my current piece of research where both qualitative and quantitative tools are being used as well as inductive and deductive approaches. This, initially, seemed misaligned in light how many texts approach the research process.

Many texts place induction and deduction at either end of a spectrum, just as they have placed quantitative and qualitative at the same polar extremes. However the interpretation of induction and deduction has been viewed in a similar fashion to Kolb’s (1984) experiential learning cycle, where initially involvement within an activity occurs, then reflection on that involvement occurs, this is followed by learning through analysis and finally feedback or application of thoughts and ideas; this in turn starts the cycle off again. The table below links Kolb’s learning stages with induction and deduction interpretation.

<table>
<thead>
<tr>
<th>Kolb’s Experiential Learning Cycle Stages</th>
<th>Induction or Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete experience</td>
<td>Induction</td>
</tr>
<tr>
<td>Feeling – learning takes place by being immersed in the problem, and relies more on intuition than logic</td>
<td>Induction/deduction</td>
</tr>
<tr>
<td>Reflective observation</td>
<td>Induction/deduction</td>
</tr>
<tr>
<td>Watching – consideration of previous experience, reflect so as to formulate expectations</td>
<td>Induction/deduction</td>
</tr>
<tr>
<td>Abstract conceptualization</td>
<td>Induction/deduction</td>
</tr>
<tr>
<td>Thinking - analysis of the problem, reflection so as to develop theories for the future</td>
<td>Induction/deduction</td>
</tr>
<tr>
<td>Active experimentation</td>
<td>Deduction</td>
</tr>
<tr>
<td>Doing – the application of thoughts and ideas, learning through trial and error</td>
<td>Deduction</td>
</tr>
</tbody>
</table>
This use of both inductive and deductive approaches is important as the research uses ‘Grounded Theory’. Glaser and Strauss (1967) initially introduced Grounded Theory where theory is generated or derived from data, systematically collected and analysed through the research process. This use of induction and deduction is supported by Bryman and Bell (2003, p12) who argue that grounded theory is an iterative process which includes elements of both induction and deduction. Hussey and Hussey (1997) cited in Saunders, Lewis et al (2003) refer to grounded theory as having both inductive/deductive elements, that is, theory being grounded in such continual reference to the data. This, again, seems to contradict, how many texts refer and introduce the role of induction and deduction within the research process.

The emergence of social sciences in the 20th century led social science researchers to be wary of the deductive approach.

(Saunders, Lewis et al. 2003)

4. The relationship between philosophy and methodology within research texts

Within the research arena there are varying views on how to carry out research. One only has to look at the number of research texts available to students and researchers to identify this wide and varied approach. Given the number of texts, within a variety of disciplines, by a multitude of authors, one may assume that the process of research should be straightforward. On reflection this is certainly not the case and is in fact one of the most daunting, messy and controversial areas of any piece of research. Saunders, Lewis et al.,(2003, p5) state that the research process is rarely rational and straightforward, the reality [being] considerably messier.

Most research texts divide research into two main areas, quantitative and qualitative approaches. Whether this is done for ease of explanation, or to reflect differences in style or marketing, (for structural reasons or for addressing alternative research disciplines) or simply differences in approach is in hindsight not necessarily useful for the researchers or student. The important issue is not necessarily the number of texts but that some texts misalign and mangle the research process. The outcome of which is that students and researchers follow this format, therefore falling neatly into the two divisions and in turn base their research upon these divisions. It may be common for students’ to start with the distinction between philosophies and then to group tools accordingly in separate and distinct sections.

5. The dilemma

In many cases research may be categorized as ‘positivist’, and may in fact, be designed to reflect the goals of positivist thinking. That is, the world is measurable, controllable, and explainable. Easterby-Smith, Thorpe et al. (2002, p28) argue that the key idea of positivism is that the world exists externally, and that its properties should be measured through objective methods. This infers that only knowledge, which is observable, is in fact valid. This then brings together the epistemology of positivism with quantitative methods i.e. methods, which are essentially numerical evidence, following a very ‘natural science’ approach to the research in hand.

The issue for researchers and students alike then becomes how to use positivism and quantitative methods within the social arena? Given the definition of positivism how can the concept of social science research be controlled, measured, and replicated? One way may be for social scientists to create or construct ‘closed systems’ or alternatively they can use sampling methods within the design of the research to try in some way to replicate what ‘natural sciences’ take for granted within their experimental approach to research. They may ask the question is there a truth that they believe they can objectively describe? However often this relationship and the impact between philosophy and methods are not addressed.

One could, from the research texts, take this relationship between positivism and quantitative methods as being almost a law or ‘truth’. Yates (2004) does highlight (with other authors) that quantitative methods can be used within other areas for example within the social sciences. However, this discussion in many texts is
often limited and given as an ‘add-on’ which inevitability students seem to neglect. This results in the selection of the ‘easy’ option, which perpetuates and maintains the relationship between positivism and quantitative methods. Alternatively the selection of tools may be due to disciplinary expectations but what must be emphasised is that the researcher should choose the most valid approach given his/her research question. Yates (2004, p14) goes on to argue that though one can therefore clearly argue that positivist thinking has influenced quantitative or numerical research we need to be careful how far we take this argument. This could be seen as the justification that quantitative methods are just as appropriate within an interpretivist piece of research as within a positivist or how positivists can use qualitative tools.

Ticehurst and Veal (2000, p15) support this linkage between quantitative and positivism by stating that the quantitative approach to research is also known as management science or operations research. Therefore linking disciplines with philosophy. They then argue that quantitative and qualitative methods are linked to positivism and interpretivism epistemologies, as shown in their diagram below:

The placement of qualitative and quantitative methods as polar opposites is further reinforced by Ticehurst and Veal (2000, p18) when they argue that there is considerable debate among scholars about the relative merits and value of qualitative versus quantitative business research and that the debate is often aligned with differing philosophical positions.

This in essence creates an almost mutually exclusive situation for students and researchers; whereby depending on whether one takes a positivistic or critical interpretivist stance one will use either qualitative or quantitative methods. Closer inspection of figure 1 (Ticehurst and Veal 2000, p19) raises the issue of placement of other approaches and methodologies. For example, by placing feminists on the qualitative end of the scale are Ticehurst and Veal suggesting that there cannot be positivist feminist scholars. Again the placement of historical approaches suggests that econometric historians do not exist; surprising given the work by Fogel and Engerman (1974) Time on the Cross: the economics of American Negro slavery; where quantitative methods were used to investigate a morally-laden topic, that of slavery.

This concept of polar opposites is further encourage by Saunders, Lewis et al (2003, p82) who refer to the research process as an ‘onion’. Within this ‘onion’ the second layer refers to the subject of your research approach that flows from your research philosophy. Therefore linking the philosophy of positivism with different approaches, in this case deduction and similarly interpretivism with induction.

Therefore whether one’s research should use a deductive approach, in which you develop a theory and hypothesis (or hypotheses) and design a research strategy to test the hypothesis; or the inductive approach, in which you would collect data and develop theory as a result of your data analysis is paramount. Again this gives the student a seemingly either or dilemma. It infers to the student or the

Figure 1: Approaches and methodologies – Ticehurst and Veal (2000, p19)
researcher that the research approach of induction or deduction are in fact mutually exclusive; in the same way that positivism and interpretivism are placed at polar opposites (Saunders, Lewis et al. 2003, p85).

![The Research Process Onion](image)

**Figure 2:** The research onion – Saunders, Lewis, Thornhill (2003, p83)

Saunders, Lewis et al.(2003, p87) perpetuate this polar opposite interpretation by arguing that followers of inductive approach would also criticize the deductive approach because of its tendency to construct a rigid methodology that does not permit alternative explanations of what is going on. This again creates, in terms of students and researchers, a situation of an either or approach to research. Inferring that it is not possible to use an inductive and deductive approach within the same piece of research.

Saunders, Lewis et al (2003) do identify that such labeling is potentially misleading and of no practical value. However this caveat is not enough to persuade students and researchers that methods are dependent on the research questions not on one’s philosophical stance.

Therefore this non rational alignment between positivism, quantitative methods and deduction and the opposing alignment of critical interpretivism, qualitative methods and induction limits and confuses the research process, within the eyes of the student researcher.

Waring (2000, p2) sums up this mismatch by highlighting that this naïve approach and understanding is unfounded by saying

> it is a mistake to adopt only one approach in some form or another,........ methodologies are best used in a complementary way.

That is to say if researchers focus on one approach, all of the time, there is a possibility of losing sight of the bigger picture.

### 6. The relationship between philosophy, theory and research methods

The relationship between research philosophy and research method is an important one, as highlighted by Easterby-Smith et al, (2002), as it allows one to:

- Take a more informed decision about the research approach;
- Decide which method(s) are appropriate for the piece of research, and;
- To think about constraints which may impinge on the research

Pickard and Dixon (2003, p2) in their article address similar issues when they ask does the choice of a methodology
imply adhesion to the axioms of an individual paradigm or is it possible to mix and match methodologies to achieve a research goal?

Therefore for the researcher designing a project there is a requirement to identify and understand the relationship between theory and methods. The aim is not to say that there is no relationship between research philosophy and research methods. At best the concept of philosophical pluralism and methodological pluralism is trying to identify that a method does not select a theory but that there is an elective affinity between a theory and a method. This is not the same as saying that if one follows a positivistic epistemology one would use quantitative methods and a deductive approach. The idea of an elective affinity (Mutch 2004) allows one to identify that one’s ontological views do in fact select, or lend themselves to certain approaches but being aware of these allows one to select what is best, from the myriad of tools available, for a particular piece of research.

This relationship between philosophy and methods can be described as follows:

If one thinks that the social world is constructed by narrative and that there is no means of discriminating either between story and reality or between different stories, then one can’t (logically) employ methods that assume an external reality. There would be no point, as one does not believe there is such a reality to be counted or categorized. The only outcome of this would be to write narratives that appear more persuasive. (Mutch 2004)

Therefore the concept of an elective affinity allows one to state that there is such a relationship between theory and methods. In hindsight, there is no question that such an affinity exists, given the regard for natural sciences elicited between positivist social science researchers and quantitative methods.

What is argued is that although this relationship is identified it is not regarded as totally exclusive, as argued by Saunders, Lewis et al (2003) with their view of ethnography.

Saunders, Lewis et al (2003, p93) argue that ethnography is firmly rooted in the inductive approach which ties in a particular methodology to a particular approach. i.e. it [ethnography] emanates from the field of anthropology. The purpose is to interpret the social world the research subjects inhabit in the way in which they interpret it.

As Crotty (1998, p15) argues that many methodologies known today as forms of qualitative research have in the past been carried out in an utterly empiricist, positivist manner………this is true of the early use and history of ethnography.

This indicates that even methods that are currently viewed and connected to one epistemological stance are not totally exclusively tied. Therefore what is important for researchers and students to realise is that there is an elective affinity between theory and methods but that it is not a fundamental law. Saunders, Lewis et al (2003, p88) acknowledge this by saying so far as we have conveyed the impression that there are rigid divisions between the two approaches to research [inductive and deductive]. This would be misleading.

The ability to blend, and use methods, which are appropriate for each individual piece of research, is an important issue for researchers and students to realise and incorporate into their research. Crotty (1998, p15) supports this by arguing that we should accept that, whatever research we engage in, it is possible for either qualitative methods or quantitative methods, or both, to serve our purposes.

This debate on the misalignment of philosophical and methodological pluralism is an extremely important one for research students, if only to clarify one’s ontological and epistemological perspectives and research approaches. Unfortunately, students and researchers alike often neglect this important thought provoking debate.

This upon reflection has generated the discussion and thought which has brought about the concept of a ‘hierarchy of needs’. The aim of this is to raise debate,
for researchers and students, about the research process and their interaction within it; specifically the relationship between research philosophy and research methods.

It is also not only an opportunity for students and researchers to debate but also for supervisors to engage in and discuss how the research process is actually disseminated. Often there is a misalignment between expectations of supervisors and those of the research student.

Although the process of research has changed i.e. at one time only doctoral students were expected to engage with the philosophical issues of research. Now Easterby-Smith, Thorpe et al (2002) argue this engagement is expected at masters and in some undergraduate courses. This is seen as beneficial as Easterby-Smith, Thorpe et al (2002, p3) argue that it is unwise to conduct research without an awareness of the philosophical....issues that lie in the background. The approach to research is influenced and involves some kind of philosophical choice about what is important.

However the question is whether or not undergraduate or in some cases master’s students need to engage fully with the philosophical debates surrounding the research process. Or are there more important issues for researchers and students to undertake at different levels of research, in terms of the research process. As the current requirement for students at all levels to engage with the whole research process, from philosophy through to methods and techniques inevitably causes problems. The result is that words, concepts or ideas become mixed and confused because the pressure to engage with these debates is not appropriate or at times is too much for students at this stage or level within the research process.

Therefore for researchers and students to state transparently what their philosophical and methodological stance is, and more importantly the relationship between the two requires a great deal of understanding and level of sophistication. Unfortunately this concept of stating clearly and transparently that the piece of research, in question, is using for example a multi method approach is not that common within the research literature and has traditionally caused much debate. Mingers (2003, p1) argues that multimethod research was quite scarce.

Reflecting on the issues between philosophical and methodological pluralism has generated the ‘Hierarchy of Research Needs’ seen in fig 3. The aim is to identify what is expected and what is feasible at different levels of research.
The overall result of the issues discussed is that researchers and students tend to be confused and wary of the research process. Often just trying to get through the process as best they can and in doing do so they construct a research methods section that they think justifies the research they have carried out. If instead of the pressure to engage in the philosophical debates was removed, at certain levels, and more emphasis was placed on the collection, analysis and dissemination of the evidence gathered this maybe a step in the right direction for students, researchers and supervisors.

7. Conclusions

The overall outcome from this paper can be highlighted with the following points:

Methods and their use are influenced by philosophical arguments but these methods are not fundamentally applicable to any one or particular argument.

That the linking of methods to philosophies sometimes confuses in choosing the most suitable or appropriate research approaches to use in a given situation.

Although caveats may be given in textbooks to say they are not the same
(positivism = deduction = quantitative methods); care should be taken with regard to aligning methods with philosophical stances.

Students depending on their level within the research process find it difficult to deal with the ambiguities of the research process – therefore some form of research hierarchy of needs could be a useful starting or discussion point between students, researchers and supervisors, i.e. what is expected in terms of understanding, analysis, synthesis and criticality at various levels of the research process:

- **undergraduate** – using research methods or approaches and focusing the generation and analysis of evidence;
- **post graduate** – an introduction to research philosophies and their relationship to research methods and approaches; and
- **doctoral level** - a critical analysis of these philosophies in line with the research being undertaken

What may be more beneficial or important is a debate on the feasibility and implementation of hierarchy of research needs. This may involve for example undergraduates basing their research on evidence – ‘what evidence would persuade one that this is a valid piece of research; as opposed to the philosophical debate surrounding the piece of research.

**References**


From PostGrad to Professional: Useful tips for choosing and executing a doctoral thesis

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Nothing is more satisfying than standing on the starting block knowing that you have a backbone to take you through the race -- not a wishbone.

[David Wilke: Montreal Olympics 1976]

Abstract: The future of academic information systems will be shaped by doctoral students. Doctoral students need, therefore, to recognize that they -- not their supervisors or colleagues -- are in charge of their study, (Grover, 2001). The goal of this paper is to offer guidance to students on entering, surviving and flourishing during post-graduate study and beyond. I teach in the Information Systems and Technology department at the University of KwaZulu-Natal, and so much of the advice is addressed to this group, but others might find it useful. It is also rather South African-specific, but students elsewhere may find a useful idea or two.

Keywords: post-graduate, doctoral dissertation, skills

1. The skills

Students need to master certain skills as noted by Turner (1986). Students should understand the content and boundaries of knowledge in their field in order to formulate interesting questions for investigation and to permit the accumulation of knowledge. They also need to develop methodological skills to investigate these questions once they are identified. Doctoral students should keep in mind that one learns by acquiring experience in executing research. Also, students need the skills to present their research results in a clear and concise manner (Turner: 1986).

Lee (1997) argues that there are some things that doctoral students should be able to explain better, but other things that they cannot explain at all. One of the skills needed by a researcher is to note that a good inside strategy is to have a good outside strategy. Part of this outside strategy should be to have collegial responsibility to the program and other colleagues. There are some aspects of disadvantaged universities and Technikon that are more daunting than others, and finding a research topic is perhaps the biggest obstacle for most of these students. Westfall (2001) argues that students should design and package their research so that it will generate more impact outside the institution. This would influence relevance as well and the eventual final inspection of the thesis.

Grover (2001) argues that doctoral students are not politically astute. One of the skills of the doctoral student should be aware of is that the doctoral program involves a higher level of dependence on faculty. The problem is that some faculty tend to be parochial and ego-centric. Students should be aware of this type of politics, otherwise they might be caught in the middle.

Students also need to keep in mind that IS research is influenced by multiple stakeholders with conflicting perspectives and should have the skill to make sense of this. Lee (1997) noted that students should ask: How much competition is there in your particular field? What relationship do you have with the faculty, the research customers, etc.? In other words, the student should have the skill to formulate and follow through with a research strategy.

2. Body of knowledge

The IS doctorate should be familiar with MIS research frameworks and the management of the knowledge frameworks. Universities and Technikons do not expect doctoral students to know everything. That is why they provide a starting list for these students. The student's body of knowledge should prepare him or her to teach, do research and interact with the community. The student must be aware that he/she will not
become an expert in everything (Davis, 1980)

3. The topic

Westfall (2001) notes that students should pick topics where academia has a competitive advantage over outside researchers. At the same time, these topics should be interesting and accessible to external stakeholders. However, he also noted that PhD students, in addition to having a great source of novel ideas, also represent a tremendous intellectual resource that can be enlisted to help solve problems that are truly relevant to the larger society.

Students should create synergy (Grover, 2001) that is, to have a breadth of knowledge in the field and create their own schema of key areas and their relationships. The topic should allow a student to start building depth in an area. By creating synergy between projects that require research, students can help facilitate the creation of a better thesis, help in time management, and possibly get a head start on a dissertation topic.

The characteristics of an ideal topic are to some extent incompatible:

- Westfall (2001) notes that students should ask: Is this a real and significant problem? The solution needs to make a difference for an identifiable group.
- Other factors to consider are: fundamental issues, simplified complex theories, anomalies, creation of new values and how it fits with current and future research (Alter and Dennis, 2002). This is an important decision about what to explore. It is the same for each doctoral student. The best approach is to design a framework and speculate on topic selection.
- The subject should be timely. Previous groundwork should leave your research problem ripe for completion, and it should be in an active area with potential for future work and employment. If a field is too crowded, and the subject too prominent, then you risk being "scooped" by a more experienced researcher who is able to work faster than you. In this case, you may be forced to start over again (rather disastrous) or at least publish jointly (possibly a blessing, but surely an inconvenience).
- Concise theory is essential for all quantitative research. Doctoral students should remember that theory is the "why" of the phenomenon, not the "what" (Dennis and Valacich, 2001). An important point to remember is that theory can summarize prior research, but must go beyond the empirical data to explain why the data are the way they are. On the other hand, Benbasat and Weber (1996) noted many senior members of the IS discipline expound the virtues of reliance on reference disciplines.
- Your work should lead to a well-defined set of results to which you can lay claim. Also, will the results be interesting? In particular, employment prospects will be lessened if you merely complete a small piece of a very large project or piece of software that is closely identified with your supervisor, or is published with a long list of collaborators. On the other hand, it is impossible to work in a vacuum, and your task can be significantly harder if you don’t have a group of people working on closely related problems with which you can interact and share code.
- The best research shows a high level of creativity – and is often somewhat speculative. It is often unclear at first how the ideas will develop. On the other hand, a multi-layer plan of research is a valuable asset. Disseminate the results in such a way to reach the larger market.
- The topic should not be too ambitious. Students sometimes try to do too much and thereby spend too much time. The supervisor should try to narrow it down. Grover (2001) notes that the supervisor should help students evaluate their ambitious changes in terms of costs and benefits.
- The research design will always have a flaw in it somewhere. Dennis and Valacich (2001) argued that the best research designs, regardless of method, are those that accept their
limitations and play to their strength. Students should keep this in mind. The primary strength, according to them, is the ability to allow you to generalize the research.

- You should really enjoy the subject, and want to spend the next several years with it!

An ideal subject is of no use without a research supervisor who is willing to direct you in it. Clearly some compromise is necessary here! Also, students should remember that academic IS research can be useless largely because practitioners do not pay much attention to it (Truex, 2001)

4. Getting research ideas

4.1 Becoming an active reader and listener

Henderson (1986) (part of the Panel 6 as chaired by Turner) argued that students need to read critical reading lists by using take-home questions and gaining experience at the same time. It is important to make the transition from the passive mode of learning that traditional lecture courses encourage to an active and critical learning style. Jenkins (part of Panel 6 as chaired by Turner, 1986) noted that to attempt to solve the questions requires large amounts of time and frequently contributes little toward completion of a thesis. Whenever you read technical material, evaluate a piece of software, or listen to a research talk, ask yourself these canonical questions:

- From where did the author seem to draw the ideas?
- What exactly was accomplished by this piece of work?
- How does it seem to relate to other work in the field?
- What would be the reasonable next step to build upon this work?
- What ideas from related fields might be brought to bear upon this subject?

One technique that some find helpful is to keep a written log of your technical reading and listening. Review it periodically to see if some of the ideas begin to fit together.

4.2 Exposing yourself to research

Exposure to conducting research could be limited because of the students' lack of real experience in conducting research and the fuzzy definition of quality applied to research (Jenkins, Part of Panel 6 as chaired by Jon Turner, 1986). To overcome this lack of experience students need additional time such as research practicums, etc. Set aside some time every week for trying to generate research ideas. Some possible catalysts are:

- Make a weekly trip to the library to read at least the abstracts from the premier journals in your field. Choose an article or two to read in depth and critique.
- Make a weekly investigation to find technical reports in your field, using electronic resources or libraries. Read selectively and critique.
- Attend a research seminar or colloquium series. Listen and critique.

Add these to your log, and ask canonical questions. As you review the log six months from now, you may find something that strikes a chord then but is beyond you now.

4.3 Directed study

Which comes first: the research supervisor or the research topic? The answer is, either. If you have identified a compatible supervisor, you could ask for an independent study course. Both of you together set the focus for the course, with you having more or less input depending upon your progress in identifying a subfield of research.

4.4 Developing the germ of an idea

Once you have identified a topic that looks feasible, make sure you are aware of all of the literature in the area. Keep reading and listening, and keep distinct in your mind what is different between your work and others. If you do not frequently review the literature you read months ago, you may find yourself unconsciously claiming credit for other people's ideas. On the other hand, don't let another person's frame of mind limit your creativity.

4.5 A pitfall to avoid

It is possible to spend almost all of your time in literature review and seminars. It is
easy to convince yourself that by doing this you are working hard and accomplishing something. The truth of the matter is that nothing will come of it unless you are an active reader and listener and unless you assign yourself time to develop your own ideas, too. It is impossible to "finish a literature review and then start research." New literature is always appearing, and as your depth and breadth increase, you will continually see new collections and related areas that must be studied. Active listening and reading must be viewed as "continuing education" that will involve you for the rest of your career. Don't fool yourself into thinking it must be finished before you can begin research.

4.6 Choosing an Idea

From reading, interacting with your supervisor during independent study, or work on a research assistantship, some possible projects will emerge. Make a list of open problems and possible projects that are of interest to you, and discuss them with potential supervisors.

4.7 Supervisor

For many students, supervising means a support service for individual learners. Once the idea had been selected as it is important that you get an interim supervisor or approved supervisor at the time of registration. This should be a mutual agreement between student and faculty members and should be approved through the official channels. Should the working relationship turns sour, then it should be resolved as soon as possible or changes should be made.

The supervisor should advise you on rules and procedures, should have meetings, be knowledgeable and help with time management. The supervisor should also be able to advise you on the examination process that you will have to go through. Mullins and Kiley (2002) argue that many supervisors are poorly placed to refute anecdotes as often they are able only to speak from their own, sometimes narrow, experience. Doctoral supervision is an advanced form of education and students should keep in mind that its purpose is to encourage intellectual and professional growth in the student. All of this requires serious commitment on the part of the supervisor.

5. Remain active

Even after you have decided on your initial focus, it is important to continue a routine of reading new journals and technical reports and attending seminars. All of these sources can contribute to the development of your idea. At this stage you can add one question to the canonical list: How can these ideas help me solve my research problem?

Remember that often the initial idea is quite far from the final research topic. If you remain active in reading and listening, it will be much easier to generate alternative topics if the time comes. Most students find that doing the research is the most challenging part at disadvantaged universities and Technikon. They often budget their time to allow a very short period for the actual writing of the research.

This plan invariably leads to an unpleasant surprise: writing can be a very slow process! Here are some of the often unanticipated reasons:

- In order to get a well-written paper, the first two or three drafts must often be completely discarded!
- You might not have new ways to apply to existing science or theories.
- In the course of your several years of research, you have probably changed notation several times, developed new points of view on your work, and developed many results that looked significant at the time but now seem to contribute nothing toward your final product. Sorting through all of your work and reorganizing is a lengthy process. It could also lengthen your stay at the university or Technikon (Jenkins, Panel 6 as chaired by Turner, 1986). It usually takes a minimum of two years to complete but most candidates require three to five years (Remenyi and Money, 1997).
- Even if you have several technical reports, conference papers or journal articles discussing partial results, the audience for your research is different, and thus the method of exposition must be significantly changed. A research paper is addressed to a group of experts in the field, who presumably
know the literature and the background issues quite well. A thorough literature review must be included, as well as an evaluation of where your work fits into the scheme of things.

- All the small details that were put off and forgotten must now be filled in. Citations must be checked, the historical progression of various results must be carefully documented, the “trivial cases” must be worked through, and the documentation of your methods must be complete. Your research supervisor will probably have strong opinions on how the work should be presented. Adapting your style to these requirements will take some flexibility and thought.

- Your faculty members, your first detached readers, will often find undefined jargon or symbols, holes in your arguments (or at least in your presentation of them), and other deficiencies. Jenkins (part of Panel 6 as chaired by Turner, 1986) argues that the feedback students receive on their topic analysis from various faculties does little to help crystallize the students' concept of quality.

- Even after you are on track, you will probably find that a "good" day of writing produces about two pages, leading to an overall average of perhaps a quarter page per day.

6. How can you minimize the pain of writing?

Some of the more successful students take the time to build an evolving reference set, read copiously and seek opportunities to work with colleagues and faculty (Grover, 2001). Students must watch out, however, because students noted for their competence and motivation tend to get more demands on their time from their colleagues and faculty and this takes away the time to write. Some habits begun early in your research will help:

- Keep careful notes about your work. You might choose to keep bound logbooks (square ruled paper is helpful) or online notes. Write your notes regularly: write up every new result, but make an entry at least weekly even if you believe that nothing of significance has been accomplished. Even noting what you are thinking about can be helpful.

- If possible, write up each piece of the work for publication as it is completed. This makes the final writing easier because each piece is documented at its completion time rather than months or years later, and the early write-ups give a basis for organizing the research. In addition, it establishes your reputation early and makes the job search much easier.

- As you read other research and published works, be a student of technical writing styles. Find out what works and what doesn't. Study a good writing manual.

- Watch out that you do not fall in a lull period (Grover, 2001). Students sometimes take a break and one month becomes two, then three and eventually the supervisor loses interest. Then it is a slow process getting back into the dissertation mode.

- Keep the following in mind when you compile your thesis. It should have elegance of design, be creative and all should fit together. In other words, it should be a well-sculpted piece of work.

Students should keep the above in mind and ensure that they can do a proper reference citation. I have seen many proposals and theses that contain spelling errors because students did not have it spell-checked or proofread by an expert. My motto has always been to check, re-check and double-check.

A student who has developed skill at writing non-technical term papers as an under-undergraduate will have an easier time of learning to be a good technical writer, but there is one additional skill that must be added: you must also be a good learner! On the other hand, Armstrong (1980) argued in his paper that articles that were more difficult to read were rated higher in prestige by academics. He discovered that clear communication of doctoral and other research is not appreciated. Armstrong concludes his article by noting faculty are impressed by less readable articles and noted that, "If you can't convince them, confuse them."
When you write a term project, you are explaining the work of others. You have a good idea of what is immediately obvious and what is more difficult to grasp, since you recently went through the exercise of grasping the material yourself.

It is easy to be fooled into thinking that since something is now obvious to you after several years of study; it is also obvious to your reader. The most difficult part of research writing is organizing and presenting your material in an understandable way. An important early step is to develop a tentative outline. The outline will probably change several times, but it is important always to have a current one foremost in your mind so that you can make the pieces fit together smoothly.

Recapitulate what has been accomplished and discuss ideas for future work. Don't think that the research must be written starting at page 1 and continuing until the end. Most often, the presentation of the "big ideas" shapes the presentation of "the problem." The introduction is often written (or at least rewritten) last. The important thing is to jump in and to begin writing something, and make notes along the way of how other sections need to be adapted so that they all work together.

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Historiography - A Neglected Research Method in Business and Management Studies

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Abstract: The objective of this speculative paper is to open a debate as to the importance of historiography in the field of business and management studies and to this end the paper argues that it is an under utilised research paradigm.

It is the paper’s contention that history has a special role to play in academic research. It contextualises the issues being studied and it gives shape to the parameters of the understanding which is offered by the research. Without access to a history of the issues and the ideas being examined it is difficult to make sense of the current situation. Being able to have a broad perspective of the history and the current situation opens the way to being able to make a valuable contribution to the theoretical body of knowledge in the field. Business and management studies can obtain much from historiography and this paper indicates how it may be used in this context and its affinity with other accepted narrative based research paradigms already in use in this field.

Keywords and phrases: History, historiography, historicism, context, knowledge, facts and figures, pedagogical understanding, facts, case studies, critical realism, dialectic, story, narrative.

1. Introduction

This paper is a review of historiography and how it could be used in the field of business and management studies. It is based on the academic and business experience of the authors, which amounts to some 50-person years, as well as a review of the literature. The intention of this paper is to open a debate as to the importance of historiography in this field of study and to this end we argue that it is an under utilised research paradigm.

Historiography can offer the business and management researcher an opportunity to acquire a rich understanding of situations and the context in which they exist. Knowing the background to any situation or to any issue enhances our comprehension and improves our ability to see what is important and what is not. In the words of Elton (p67, 1989), “Historical knowledge gives solidity to the understanding of the present”.

This paper, written for business and management researchers, reviews the role of history in academic research and suggests a methodological framework for using historiographic techniques in business and management studies. The methodological framework is expressed as a series of nine steps and offers suggestions about how to approach this type of research.

2. Perspectives on history

History has had a mixed press with protagonists who proclaim its undoubted value and antagonists who question its worth. Marwick (1979) pointed out that:

"History is attacked, from the intellectual heights, as being vague, cliché-ridden and devoid of basic standards, and, from the popular lowlands, as being pedantic and over concerned with the detailed persistence of the insignificant."

Wittgenstein (1915) objected to, not a knowledge of history as such, but rather the idea that the history of an issue or situation will in some way dictate our current or future attitude or policy towards it. The danger he alludes to lies in believing that history or tradition not only informs the present but dictates to it which would have been similar to the historical deterministic position of Hegel. This attitude of not being able to put history to rest is clearly seen in political clashes around the world.

However as a general rule business and management researchers do not become involved in this use of history. Instead Arnold (2000) suggestions that “all history in some way wishes to say something about its own present time” and “the need to interpret the past, not simply present it”;

1 See http://dave.burrell.net/hegel.html accessed 17 July 2004
offers a basis for contextualising historiography within business and management studies.

3. History and the continuum of existence

Fortunately there is a much more positive way in which history is also used. Events do not take place in a vacuum. There are always preceding circumstances to any event as well as, of course, consequences. In order to be able to understand an event and to evaluate it, it is important to know about what has led to it. In fact any understanding of a phenomenon or a situation will usually have to be based on a knowledge and appreciation of the trajectory of circumstances which have lead up to it. As stated above this means that any real appreciation of the present requires an understanding of the past or the history of the situation. Those who know the history of the situation can more fully appreciate what is currently happening and the context in which it is happening. This implies a continuum in our existence and assumes not that in some respects the present or indeed the future looks something like the past but that the present or the future will be informed by the past. It is this ability of the past to inform the present and which makes historical studies interesting to the business and management studies scholar.

4. The value of history - contextualisation for effectiveness

The importance of the contextualisation of any issue is well addressed by Neustadt and Ernest (1986). They point out that only when knowledge is contextualised may it be used effectively. Understanding the history provides the contextualisation. In this respect knowledge of history may be seen as having substantial practical potential. But learning from the past is never simply a one-way process. As Carr (p68, 1967) pointed out:

To learn about the present in the light of the past means also to learn about the past in the light of the present. The function of history is to promote a profounder understanding of both past and present through the interrelation between them.

Any understanding of a phenomenon or a situation will usually have to be based on a knowledge and appreciation of the trajectory of circumstances which have lead up to it. It is this ability of the past to inform the present and which makes historical studies interesting to the business and management studies scholar.

4.1 Who writes the history?

It is sometimes no simple matter to locate the real perspective of the history. At the end of the day history is a story and as such it has to be told by someone. However Arnold (2000) pointed out that the process of creating the story is not one of incremental construction based upon building blocks of facts, but instead requires analysis of cause and effect, interpretation of previous analysis and crucially “arguing what the story means”. Whoever does the telling will have a point of view. Carr (p11, 1967) pointed out that it used to be said that the facts of history speak for themselves. But today this type of thinking is seen as too simplistic. The term fact is used often in a very broad sense and what is regarded as a fact by one person may not be held to be so by another. In practice facts are frequently no more than those ideas, which are presented by the storyteller. For every fact that is used in any story or narrative there are frequently dozens or even hundreds of other facts which are omitted, as they did not suit the slant, which the storyteller wanted to give. But besides the issue of what may have been included and what may have been omitted there is another deeper consideration. According to Barraclough (1955):

The history we read though based on facts, is, strictly speaking, not factual at all, but a series of accepted judgements.

So called facts and their interpretation can be so intertwined that they are virtually inseparable and although a historian may try to be objective and unbiased, this is not always achieved.

Carr (p23 1967) reinforces the idea of the subjectivity of history when he said:
Study the historian before you study the facts.

Certain things are sometimes said to be “known” and could be argued to be independent of judgements as suggested by Barraclough. But Collingwood (1945) reflected “all history is the history of thought, and history is the re-enactment in the historian’s mind of the thought whose history he is studying”. Carr (p23 1967) points to this problem of facts by saying, “By and large, the historian will get the kind of facts he wants”. Keegan (1997) put an additional spin on this when he said “Historians are committed to controversy” and what appears to be simple facts are often not so simple at all.

5. Historiographic research

Although history has certainly been written since the time of Herodotus (c. 484-425 BCE), who acquired the accolade of the “father of history”, it was first properly recognised as an academic field of study in England in 1622 when William Camden established a Chair in Civil History at Oxford University (Black et al., p222). Ranke (1795-1886) established history as a profession primarily based upon his insistence on working directly with primary sources – a focus passed on to his students. However Elton (1989) claims that only in modern times has it become a “properly developed discipline”. Elton commenting on the older approach to history describes Francis Bacon’s book the Life of Henry VII as an “untrustworthy piece of brilliant journalism”. Marwick (1979) points out that it was only in the nineteenth century in Western European and North American universities that historians began an ordered and systematic study of history employing a range of intellectually rigorous concepts that changed the attitude and purpose of those who study history. There are many different aspects to historical rigour such as the need for the integrity of present evidence, avoiding preconceived ideas, a comprehensive set of sources, thorough criticism of sources used, and intellectually honest argument. Summarising this Elton (1989) points out

Knowledge of all the sources, and competent criticism of them – these are the basic requirements of a reliable historiography”.

But it is important to say that there is no universal agreement as to precisely how history should be researched and written (Powick 1956; Elton 1989; Marwick 1979). Marwick (1979) reinforces this by saying that history is an ill-defined profession. He also points out that the term historiography may be reserved not for the discussion of past events themselves but rather for how different historians have interpreted them.

6. History and business and management studies

History is not a popular research paradigm in business and management and consequently it has generally not been given adequate attention as a specific academic research activity. This was highlighted by Bannister (1992) in his paper which surveyed the use of historical works in the field of information systems management. Of course there are some formal and many informal works in this field which draw on history. Marwick (p31, 1997) points out that Adam Smith’s seminal work, The Wealth of Nations, is essentially historical in its approach to the study of man’s economic activities.

Business and management studies addresses a wide range of issues, which requires this field of study to draw on many different research paradigms. This paper suggests that Historiographic techniques should be given more attention as a research paradigm especially at the doctoral level.

The object of academic research into business and management studies is to add something of value to the body of knowledge. What constitutes the body of knowledge has been addressed elsewhere (Remenyi at al 2004). The question here is how can a historiography approach be used to achieve such an objective.

Historiography is an empirical research paradigm using an interpretative or qualitative approach which focuses on a chronology over a substantial period of time in order to obtain a fuller and richer understanding of a situation or set of

2 There are a large number of informal business and management histories written by retired executives. Books by Jack Welch, John Harvey-Jones and Lee Iacocca immediately come to mind.
circumstances. It is regarded by many but not by all, as being a social science (Marwick p104, 1979). This approach to research will follow the general principles of rigorous interpretative research as well as the processes associated with competent academic research and thus it is capable of producing a credible research finding.

7. The nine steps required

The steps required for this type of research are similar to those employed in any form or empirical interpretivist research. Of course the emphasis is on the chronology inherent in the field being studied. There are however certain differences in emphasis which need to be noted.

As with any stepwise description of research such as this it should be understood that frequently steps need to be repeated or revisited. As the research progresses into the research topic new dimensions can open up which may require the researcher to go back and revisit earlier steps. In historiography the evidence can actually take over and dictate the direction of the research.

7.1 The research question

Historiography, like any other research project, begins with the need to focus on a specific research question. The characteristics required of this research question differ from others in this field of study in that there needs to be a specific expectation that a study of the past will throw light on the possible answer to the current question. Thus chronology needs to be of central importance to the research question. It is clear that only certain types of research questions will benefit from this historiographic approach. Of course the question needs to be interesting, to both the researcher and to the business and management community and it also needs to be answerable. The question needs to be defensible like any other research question against any suggestion that its answer is likely to be obvious or not relevant to its current set of stakeholders. Novice researchers may fall into the trap of taking on too difficult a question and therefore care needs to be taken that the research can be accomplished in the timeframe required.

7.2 The relevance check

A historiographic approach to research in business and management studies will only be relevant in a limited number of circumstances and therefore it is important for the researcher to check if he or she is on the right track. The following situations suggest that historiography is a useful approach. It is not a definitive list but simply indicative of the type of issues which may be studied in this way.

i. If there is evidence of a previous event having a special importance on how current decisions are made or how current policy is established.

ii. If there is a suggestion that the organisation faced a similar situation in the past and that lessons learnt at that time have been forgotten.

iii. If there is a possibility that the current situation is part of a cycle and that understanding the nature of the cycle would help the current situation.

7.3 The scope of the research

Having established a suitable research question the next step is to determine the scope of the research. This requires a careful consideration of the domain for inquiry. In effect the domain establishes the principle academic disciplines which the research will need to be drawn on. Thus a research project may need to use marketing and financial and information systems ideas and concepts. Toynee (1948) made the remark that the history of an individual country could in general not be understood in isolation from other countries. This type of thinking also applies to business and management studies. It is not possible to have an in-depth understanding of marketing in isolation without appreciating finance and human resource management. Thus
scoping the question is also important. At this stage it is also necessary to establish the unit of analysis which will be used. The research may also look at an organisation, an individual or an industry. The result of this scoping exercise will be a high level plan highlighting the areas to be researched and the direct object or objects of the research. This gives the researcher a firm starting point from which to proceed.

7.4 Sources of evidence

History stands or falls on the researcher’s ability to obtain a range of reputable and credible sources of evidence. Thus the next step in this research process is to conduct a survey of the potential sources of evidence. Evidence may be categorised into primary evidence and secondary. Primary evidence consists of original sources such as interviews, minutes of meetings, diaries and contracts. Secondary evidence consists of articles in newspapers, books and other information supplied by authors or commentators who were not directly involved in the situation being studied.

There are many potential sources of evidence. They include those mentioned above as well as academic papers, corporate documents such as annual accounts, personal letters, consultants reports, government archives, autobiographies, masters and doctoral dissertations, photographs, ordinance survey maps, television and radio programs (McDowell 2002).

When the event being studied is relatively recent history sometimes, though not always offers, eye witness accounts. When this is the case the researcher needs to acquire the skills of research interviewing.

Sometimes there are more sources of evidence available than the researcher can reasonably cope with and when this happens a process of careful selection needs to be undertaken. In such cases the bias of the researcher can become a major concern. Another problem arises when different sources provide contradictory evidence. The standard approach to resolving contradiction is triangulation (Remenyi et al 1997). However in applying triangulation selection of sources and the allocation of the credibility of these sources can be a source of concern.

If it is not obvious that a number of suitable sources are available then it is probably that a historiographic approach should not be pursued. It is often not a trivial matter to establish all the relevant primary and secondary sources and this is often an important aspect of the research. Leaving out sources of evidence can seriously harm the research findings. This can occur when an organisation refuses to give the researcher access to knowledgeable informants and then other approaches have to be sought.

7.5 Assessment of methods of analysis

The assessment of the specific methods that will be used in the research is the next step. As historiography is essentially interpretist then the methods will largely come from this side of the research equation. There are some major choices to be made in this respect (Windschuttle 1996). If an entirely qualitative approach is pursued then the researcher will be looking at the use of one or other approach to hermeneutics, which is the theory and practice of interpretation, and with which the historiographer needs to be familiar. If a hybrid approach is used incorporating some qualitative techniques then perhaps content analysis may be used. This type of approach may even be supported by certain computer analysis. If this approach is taken then the research will need to become familiar with the precepts of critical realism.

7.6 Assembling the evidence

The next step is to assemble the evidence from the various sources to be used. This is a major component of the work involved. There are various techniques which may be used during this activity. Mason et al (1997) suggests that as a first step a timeline should be established but this is largely a question of preference. There is little doubt that some sort of a timeline will be produced before the research is concluded. Elton (1989) points out that the researcher may be drawn into all sorts of new areas and questions as the research proceeds. He makes the point that in historical research that “(the researcher) becomes the servant of his evidence”. Argris and Schon (1978) suggest that the
The historiographer needs to develop their own espoused theory at this stage. Throughout this work the evidence and the sources of the evidence needs to be continually evaluated so that spurious, inaccurate or false information is not included. How such evidence is omitted is not unproblematic. Each piece of evidence will have to be critically scrutinised and weighed carefully. An example of the care which needs to be taken is the thoroughness with which the motives for writing letters or creating a diary or similar documents needs to be assessed. Sometimes letters or diaries may be written ironically or sarcastically and it can be difficult to be sure the appropriate meaning of such documents is being understood and used in the research.

Each researcher will have his or her own set of criteria for accepting a piece of evidence as relevant and credible and there is no doubt that bias enters into this process. It is sometimes useful for the historiographer to ask colleagues to read evidence and to give their impression of its meaning.

Where eye witness evidence has been collected knowledge of non-verbal cues such as body language, verbal intonation and facial expressions may be helpful in understanding the evidence.

### 7.7 Developing the story

While the evidence is being collected the historiographer will be developing the story or narrative which is one of the primary products of the work. This requires the determination of patterns in and explanations of facts. Illuminating what happened and how it happened and why it happened are the central issues here and the skill of the researcher as a story teller comes to the fore during this part of the research. Story telling is an art form in its own right and the historian needs to cultivate this skill. If the story is told in an engaging manner it will be read and its credibility will be higher. If the story is told in a dull and an uninteresting way it will not be much read and it may not be considered relevant or creditable.

For this part of the research to be credible the historiographer needs to tell the story with the highest degree of integrity. The evidence may lead to a story in which there are contradictions. These need to be highlighted and where possible resolved. Of course sometimes contradictions cannot be resolved and they have to be accepted as part of the situation. When this occurs it may be possible to suggest them as a topic for future research.

### 7.8 Critiquing the story

This step involves the major intellectual challenge of the research. Once the story or narrative has been developed the researcher needs to apply the skills of critique. There is no absolute set of rules for undertaking this type of work. The type of critique employed may be wide ranging and may address the story or narrative at various levels. For the purposes of this critique concepts may be drawn from Marxism, from psychoanalysis, from deconstructionism, from phenomenology, from postmodernism, from semiotics to mention only a few sources. However what ever the source of the concepts used in the critique the purpose is to assess if the evidence is appropriate; if the evidence is creditable; and the finding are understandable. A key question here is does the evidence allow a convincing argument to be made which will allow the finding to be accepted. In this context the researcher needs to be continuously aware of the problems of bias, the problems of preconceptions and the problems of selected perception. The narrative needs to be reviewed from the point of view of it not being too narrow in its perception and thus omitting important issues. Of course, it needs to be remembered that the historiographer seldom has a full set of information. At the end of this process the researcher needs to feel confident that a credible story is being told and that the story helps add something of value to the body of knowledge. The implications are clear. In publishing his or her findings the historiographer is asserting that the findings of the research are robust enough to be accepted by leading authorities in the field. This is not a trivial task but it is essential that the work receives recognition from those who are qualified to comment on the work. But like all other forms of research the finding of the historiographer will probably not represent the final word in this area of research. As Elton (1989) points out:

> History is an unending search for truth, with the only
certainty at each man’s end that there will be more to be said and that, before long, others will say it.

d) A recognition of patterns or principles derived from inductive reasoning arising out of this account;

e) A source of new research hypothesis.

7.9 The outcome of the research

The final step is the articulation of what this project has actually added to the body of knowledge and how this could be put to use by business and management people. This will be the research findings and conclusions. In the field of business and management studies this may also include some specific management guidelines and advice.

Historiography is unlikely to produce a rigorous academic theory but it will facilitate the development of such theories. According to Mason et al (1997) the outcome of historiography research may be described under five headings which are:

a) An account of a significant fragment of the past;

b) An explanation of present circumstances or events;

c) Validation or invalidation of some theory

d) A recognition of patterns or principles derived from inductive reasoning arising out of this account;

e) A source of new research hypothesis.

All five of these possible outcomes are academic “raw material” for the production of new theory. They are also useful findings in their own right and could be regarded as competent for a research degree or for publishing in an academically referred journal.

8. Contextualising historiography in business and management studies

From the above it may be seen that there are numerous similarities between historiography and other research paradigms used in business and management studies, especially case studies and ethnography. All three of these frameworks are narrative orientated research paradigms with different emphases. Table 1 below indicates how the emphasis used in each of these paradigms differs.

Table 1: Different emphasis used in historiography, case studies and ethnography

<table>
<thead>
<tr>
<th>1</th>
<th>Key focus</th>
<th>Historiography</th>
<th>Case Studies</th>
<th>Ethnography</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Sources of Evidence</td>
<td>Any authentic and credible source</td>
<td>Primarily interviews and corporate documents</td>
<td>Primarily observation</td>
</tr>
<tr>
<td>3</td>
<td>Potential for the use of analytical or computer tools</td>
<td>Low</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>4</td>
<td>Delivery of results</td>
<td>Narrative leading to hypotheses</td>
<td>Narrative, hypotheses and theory</td>
<td>Narrative, hypotheses and theory</td>
</tr>
<tr>
<td>5</td>
<td>Generalisability</td>
<td>Not relevant</td>
<td>Some scope</td>
<td>Some scope</td>
</tr>
<tr>
<td>6</td>
<td>Validity</td>
<td>Strong potential</td>
<td>Strong potential</td>
<td>Strong potential</td>
</tr>
<tr>
<td>7</td>
<td>Potential for academic rigour</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
</tr>
<tr>
<td>8</td>
<td>Major challenges</td>
<td>Finding authentic and credible evidence and objectively interpreting it</td>
<td>Obtaining adequate access to the people or organisations required</td>
<td>Usually a single view point. Having the time required to acquire the deep understanding and then presenting it objectively</td>
</tr>
</tbody>
</table>

In most of the issues listed in Table 1 historiography constitutes a useful research paradigm which may be used in the field of business and management research.
9. Integrating historiography in business and management studies

Historiography has much to offer the researcher in business and management studies, especially for those coming to this field of study with an interpretist or a critical realist perspective Sayer (2000). In fact historiography offers a tempting resonance with these philosophical approaches.

There are numerous examples of this. Sayer (2000) proposes that social systems are necessarily open and that they evolved over time rather than equilibrated, not least because people have the capacity to learn and change their behaviour. Context is crucial to explaining behaviour by reference to the conditions within which decisions were taken and understanding how actors perceive their context and situation. As seen above historiographic research provides an approach to understanding the impact of such decisions on social systems. These themes of understanding and even evaluating change within a context were also evident in the work of Payson and Tilley (1997) where an evaluation approach based on critical realism was used to identify the impact of changes (mechanisms) on a system (Regularity) within the (context) of the environment. A key concern shared by Payson and Tilley (1997) and Sayer (2000) is to seek substantial connections among phenomena as an aid to understanding. This search for common connections then acts as a thread across subsequent evaluations and effectively becomes a historiographic study tracking interventions, decisions and consequences.

Similarly Bannister (2001) applies historical methods to assess the changing perception of Value from IT within the Irish Public sector, establishing that decisions in IT investment in public administration are driven by perceptions of value that change over time and the extent and effectiveness are closely related to the speed of evolution of perception and the ability of individual champions to overcome systemic barriers to IT infusion peculiar to the civil service.

Emphasising the importance of historiography Sayer (2000) maintains explanatory accounts must offer both a historical narrative and explanatory analysis of structure and mechanisms. Sayer (2000) also proposes that the contingency of action means that it is impossible to have a theory of history however it is necessary to interpret history in the context of theory, within such concepts it is worth looking at a proposed methodological framework for the use of the historiographic technique.

In addition historiographical research also resonates with the case study family of research methods. Historiographic research as proposed by Mason et al (1997) shares many of the same sources of evidence as proposed by Yin (2003) (Documentation, Archival Records, Interviews, Direct Observation, Physical Artefacts). It also shares the emphasis on the narrative. Yin identifies that both history and the case study focus on how and why questions. He claims that these do not require control of behavioural events. Of course Yin does characterise the case study as focusing on contemporary events. However to fully understand these in the case study context history is definitely required. The essence of Yin’s approach is that the case study facilitates research where “the boundaries between phenomena and context are not clear”. Mason et al (1997) also identifies this similarity of comparative case research and historical research.

10. Summary and conclusions

This paper is an introduction into the use of historiography in business and management studies. As mentioned above the primary objective of this speculative paper is to open a debate as to the importance of historiography in the field of business and management studies. To this end the authors argue that historiography has an important role to play in research in the business and management studies field. However the relevance or importance of history is not without its critics. It is certainly necessary to establish that historiography does not mean the primacy of simple facts. Factism is a distortion of the nature of

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4 Factism (with our apologies to the Oxford and other Dictionaries) is the emphasis on simple facts to the exclusion of understanding.
historical thinking. Even when historiography approach is clearly suitable for the business and management studies question being researched it is a challenge to undertake competent research work using this paradigm. Historiography is not an easy option for an academic researcher. Controversy surrounds its place in the social sciences. There is no simple cookbook approach. Historiographers are quintessentially individualistic. It is highly interpretist and the findings are often thought to be more personal than some researchers are comfortable with. However in this respect Gould’s (1992) words are worth remembering:

I believe that science must be understood as a social phenomenon, a gutsy, human enterprise, not the work of robots programmed to collect pure information.

As business and management studies develop it is our contention that this field of study needs to pay more attention to historiography and to use it more frequently and more effectively. After all it was the eminent economist, Joseph Schrumpeter once asserted that any discipline must have four components namely:

a) empirical data (observations and facts),
b) theories/paradigms,
c) an ethics and
d) a history.

This paper provides a starting point for researchers interested in building the historical component by identifying the applicability of historiography to the narrative based research paradigms used in business and management research. In addition it proposes a nine step framework for research that takes into account learning from historiography. Such a synthesis of the disciplines of history and business and management studies potentially increases the opportunities for new insights or knowledge.

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