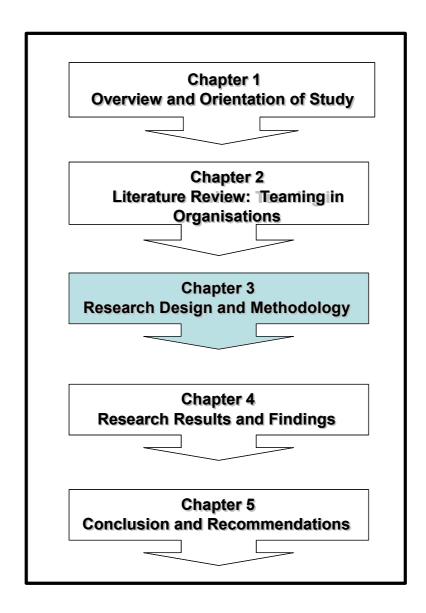


CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY





3.1 INTRODUCTION

In this chapter, the research design and methodology used in the study are presented in more detail. A rationale is provided for selecting a qualitative research methodology, and the role of a qualitative researcher is briefly explored. The population and sampling strategy used in this study are discussed. Details are provided on the data collection methods used in the study, namely in-depth interviews and focus interviews. Next, the mode of analysis is explained and, finally, the chapter shows how research trustworthiness was ensured and what quality criteria were applied.

3.2 CHOOSING A SUITABLE APPROACH

Yin (1989:27) explains that a "research paradigm is the logic that links the data to be collected to the initial questions of a study".

As has already been stated, a qualitative interpretivist approach was adopted and the study was positioned in a post-positivist paradigm. The guiding paradigm and principles have already been discussed extensively in Chapter 1. The overall strength and research value of this design lies in the in-depth insights that can be achieved, as well as in the establishment of rapport with the participants (Mouton, 2001:1). In reporting the findings, as the researcher, I had a unique and exciting opportunity to include my own voice in my presentation of the diverse voices of all the participants in this research project.

Since an **inductive** theory discovery design was used in this study, the process allowed me to develop a theory while simultaneously grounding the research account in empirical data. The strengths of this type of inquiry were that it led to in-depth insights, made the interviewees part of the process and led to thick description.



3.3 RATIONALE FOR SELECTING A QUALITATIVE APPROACH

I have an inner drive to understand people and "things" – even those things which seem obvious to others. When I selected my research method, it was therefore only natural that I would select an inquiry strategy that would focus on interaction, personal communication, human relations and deeper senses of understanding.

Abraham Maslow (1949:202) once commented with some regret:

"...we are still forced by academic custom to talk about our own experiences in about the same way as we might talk about bacteria, or the moon or about white rats, assuming the subject-object cleavage, assuming that we are detached, distant and uninvolved, assuming that we are unmoved and unchanged by the act of observation...."

The approach chosen in this study and the way it was reported on illustrates my response to his lament. Avoidance of what Maslow describes in part underpins the paradigm I argued from when I had to choose an appropriate research method. From the outset, I realised that my research journey would be subjective, rather empathetic, and embedded in personal as well as in human relations. The characteristics of qualitative research that attracted me and best suits the research question at hand are summarised in Table 3.1 (next page).



Table 3.1: Characteristics of qualitative research

| Characteristic | Description |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Research done in natural setting | Research done in the field, in-depth understanding |
| Human Instrumentation | Researcher is primary data-gathering instrument |
| Non-random sam pling | In-depth, contextual understanding. Researcher will to sacrifice breath for depth (purposeful, sampling). |
| Open-ended, emergent design | Open-ended design, Research questions might be substantially modified during study. Discovery orientation |
| Grounded (Inductive) Generalisations / Theory | Understanding and generalisations will be grounded in the data collected and analysed. |
| D e s c r i p t i v e | Data in the form of words and pictures rather than in numbers. Data will include interview notes and transcripts. |
| "Senses making" is the primary focus | "Meaning-making": i.e. the ways in which people make sense of their worlds. |
| Inductive and deductive data analysis | Although informed by theoretical notions, data will be generated inductively and tested deductively in ongoing process. |
| N e g o tia te d In te rp re ta tions | The researcher will invite interviewees to participate in the data analysis. |
| Tentativeness in Generalising | The researcher will probably be tentative in reporting on the "generalisability" of her findings. |
| Multi-vocality in Reporting | Will represent the diverse voices of multi- Positioned interviewees through stories, narratives and quotations. |

3.4 THE ROLE OF THE QUALITATIVE RESEARCHER

I believe that there is no such thing as a neutral stance. Every researcher has a face, an identity, preferences, a certain style etc. Possible sources of bias need to be communicated explicitly to the reader of a research report and should not be hidden. As the researcher, I enacted a crucial role in this qualitative research process, therefore the reader should realise that true objectivity is a myth. I was **subjective** when conducting this study, since any researcher is only human. However, I made my own biases, preferences and



assumptions as clear as possible to the respondents, which illustrated my acute awareness of my own limitations as researcher.



Figure 3.1: The researcher

I am female and in my forties (see Figure 3.1, above); I work with teams every day, think in a "right brained" manner and believe in simplicity and honesty. Furthermore, I am a trainer and an organisational development (OD) consultant who is both a team member and work with teams. All these factors may have influenced my views. However, following a sound methodological research approach when collecting and interpreting data assisted me in working around subjective and local influences.

I regard **reflexivity** in research as very important. I therefore constantly had to take stock of my actions and my role in the research process. I consistently strove to remain non-judgemental in my approach, even though I showed empathy with the emotional undertones of the respondent's reactions. Morse, 1994) stresses that by showing emotional understanding, a researcher can create common ground with the respondents.

In terms of researcher skills, Yin (1989) suggests that a researcher should develop or already possess the following skills when pursuing truths through research: the ability to ask the right question and interpret the answers – it is no wonder that Morse (1994:225) remarks that qualitative research is only as good as the researcher;



- the willingness to be flexible and the ability to read the situation; and
- the distance to be unbiased.

"I am naturally a talker and needed to focus on truly listening when conducting the interviews. I prepared numerous questions prior to the interview to ensure that I stayed focused, however, not to probe or lead the answers to suit my paradigm. I also printed my main research questions and took the list along to all my interviews to ensure that I remained focusedt.

3.4.1 Challenges faced by a qualitative researcher

Researchers have to "avoid control" (Ragin *et al.*, 2003), and throughout the interview process I therefore had to allow the subjects and material to guide me. However, this did not mean that the qualitative intervention could not be controlled. Instead, it implied that I acknowledged that I was unable to control the data and the environment in which the data was being collected.

Another challenge that researchers face is having to stay part of the research process and using themselves as a research tool. When conducting this qualitative research, in many cases, there was no clear separation between the collection of data and the analysis thereof. As has already been explained, quite often I had to analyse the data as it was collected and the next step was determined by what I learned.

3.5 RESEARCH POPULATION AND SAMPLING STRATEGY

The research sampling strategy was discussed in Chapter 1, but the selection of data sources needs to be explained in more detail.

Typical case sampling involves taking a sample of what one would call typical, normal or average for a particular phenomenon. Participants for my study were selected for a specific reason and not randomly. The initial two focus group interviews were conducted with "natural" project teams that were deliberately selected to enable me to gain a better understanding of the issue

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From the researcher's diary.



at hand. The business unit managers at both GijimaAst and the Auditor General assisted me in making my choices in terms of existing teams.

Criterion sampling was also included when selecting the sample. The criteria for interviewees were the following:

- each interviewee had to be an employee of one of the two identified organisations;
- · each interviewee had to work in a team setting; and
- each interviewee had to have previous exposure to teamwork and development.

Snowball or chain sampling follows naturally as a research project progresses. In the current study, I asked the interviewees for referrals to other individuals who may be able to provide rich information, who could provide good examples for study or who would be good interview subjects. Excellent interviews were conducted by means of this chain sampling.

Since qualitative research seeks a deeper understanding of social behaviour and phenomena, focused and usually smaller samples are usually used as opposed to random, large samples, as suggested by Giddens (1990). This approach was also followed in this study.

The most important indicator for sample size when conducting qualitative research is often the point of redundancy also called theoretical saturation of the data (Glaser,1994). For me as the researcher it was thus very important to interpret the data continuously in order to note and monitor patterns of redundancy. The sampling in my case was thus done until redundancy in the data was reached. Although I had planned to conduct 30 personal interviews, I was able to complete my sampling after 20 personal and four focus group interviews.



3.6 DATA COLLECTION METHOD

A qualitative approach was selected and the data collection methods that were used were aligned with the requirements of the research design.

As already mentioned, data was collected by means of four **focus group interviews**, each lasting about one and a half hours, and 20 **individual indepth interviews**, each lasting about an hour.

3.6.1 In-depth interviews

An in-depth interview implies some form of intense verbal encounter. Participants usually provide the researcher with information either in a conversation or in some other form of verbal interchange. **An interview** can be defined as "a purposeful conversation usually between two people (but sometimes involving more) that is directed by one in order to get information" (Bogdan & Biklen, 1982:135). The main purpose of an in-depth interview is to learn to see the world through the eyes of the interviewee.

"In qualitative research, in-depth interviewing is an important research tool for data gathering and the researcher acts as the measuring instrument" (Botha, 2001:13). In order to hone this tool, learning "about questioning, the rhythm, the form, the impact, is a task that never ends for qualitative researchers" (Ely,1991:63). It is both interesting and appropriate that Fontana and Frey (1994) refer to interviewing as "the art of science".

Kvale (1996) defines qualitative research interviews as "attempts to understand the world from the subject's point of view, to unfold the meaning of people's experiences, to uncover their lived world prior to scientific explanations". In many cases I had to ask various clarifying questions to check my understanding as well as the context.

In my research project, the personal Interview was a very versatile method to use in order to conduct qualitative research. Kotler (1991) suggests that the



versatility of interviewing lies in the fact that more questions can be asked as the interview progresses, and observations regarding the interviewee (for example, dress and body language) can also be recorded.

3.6.1.1 Interview/question format

"Because qualitative researchers depend on a field to help them ask questions, it is not a good idea to enter the field with questions that are too specific or too tight or too slanted" (Ely, 1991:56). A narrow focus from the outset might limit the researcher in terms of what he or she can see. Ely emphasises that the process of allowing questions to emerge and to be shaped during the data-gathering phase is what really makes qualitative research different from quantitative research.

Smit (2007:pers.comm.) agrees with this view and argues that structure often limits the scope and that a qualitative researcher should not use any question guide. During a personal interview, Smit (2007:pers.comm.) stressed the importance of having little structure, of using open-ended questions, of having no pre-conceived ideas and of listening.

The interviews were conducted as follows:

• The first two interviews I conducted were **informal conversational interviews**, where I focused on spontaneous conversation in the field and the topics and themes were not predetermined. After these interventions, however, I realised that I sometimes lost focus during the interviews and that the process therefore became too "loose". These interviews lasted for more than two hours each and were consequently very difficult to code. I subsequently adapted my approach slightly: I decided to use a more structured interview guide approach during the interview.



 The interview guide approach is probably the most widely used method in qualitative research. At first I thought it might be limiting, but after my first encounter with the method, I decided that it seemed to be the best approach.

After my first two "loose" interviews, I followed the principles suggested by Beals and Hoijer (1971), Lofland and Lofland (1984), as well as Hitchcock and Huges (1989:83), in implementing the semi-structured approach. They all advise researchers to prepare a series of possibly significant questions to ask during the interview process. However, the purpose is not to secure answers to these questions, but rather to stimulate the subject to talk, in the hope of learning what he or she thinks.

Beals and Hoijer (1971) describe the semi-structured approach to interviewing as the preparation of a series of possibly significant questions to ask during the interview process. The purpose is not primarily to secure answers to these questions, but rather to stimulate the subject to talk, in the hope of learning what he or she thinks. Open-ended questions were therefore posed and they were particularly valuable in that the answers provided me with quotations that become the main source of data in this study.

Hitchcock and Huges (1989:83) also mention so-called "semi-structured" interviews. They define them as interviews "which allow depth to be achieved by providing the opportunity on the part of the interviewer to probe and expand the interviewee's responses".

The rest of my interviews were thus conducted in a more systematic fashion than the first informal I interviews. However, the conversational nature of the interviews was never sacrificed. There were a number of topics or themes to investigate, but I also had freedom in terms of the wording and the order of the questions.



The common denominator between my first "open" and second "more structured" approach was that the participant's responses were mostly openended and were not restricted to specific choices provided by me as the researcher. The semi-structured approach in no way inhibited the interviewer

or interviewee. It rather provided more strategic focus. We experienced the benefit of a semi-structured, question guide interview in that it established a balance between the interviewer and the interviewee. This balance provided room for negotiation, discussion and an expansion of the interviewee's responses. The rest of my interviews turned out to be more focused and far easier to code.

3.6.1.2 The personal interview guide

Table 3.2 (next page) provides an example of the questions planned beforehand and included in the question guide. Once again it is important to note that the questions would not be asked in any sequence and were merely developed to ensure focus during the interviews.



Table 3.2: Personal interview guide

| Definition | | Prompt for | | |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------|--|
| 0 0 0 0 0 0 | How do you view the concept "team"? What is a group, what is a team? What is team building? What is team development? What are your views about and experiences of team building consultants? What do you like / dislike about team work? | 0 0 0 | Clear examples Understanding Look at emotional words like "like" or "hate" etc. | |
| Ind | Individual level | | Prompt for | |
| 0 0 0 | Are you currently part of a team? Please describe your team experiences. Do you have skills to work in a team? Do you prefer to work alone or in a team? Why? | 0 0 | Explanation Look for emotions Competency level | |
| | m level oup) | | | |
| 0 0 0 | Please explain your team role(s) in your team? Describe your team to me Do you have special team rituals that distinguish you from other teams? Explain them to me? What are currently the greatest problems and needs that you experience when working in your team? What do you – as a team – do to develop your team optimally? | 0 | Check understanding of perceptions of functional and team roles Look for a "team culture", for example, ground rules etc. | |
| Org | Organisational (Strategic) | | Prompt for: | |
| 0 0 0 | What does the organisation's strategy say about team work and development? Are you measured as an individual or as a team? Would you say your organisation has a team culture? Please explain. Explain your team training to me? | 0 | Look for references to strategy, plan, management, integrated approach, etc. | |
| Ger | General | | Prompt for: | |
| 0 | development" in your organisation, what would you do? | | Look for examples and understanding | |

3.6.2 Focus group interviews

In this study, focus group interviews were also used. Kotler (1991) defines a focus group as "a gathering of six to ten persons who spend a few hours with a skilled interviewer to discuss a project, service, organisation or other entity". He describes focus groups as useful in gathering explanatory data and gaining new insights in perceptions, attitudes and other issues.

*I found the focus group interviews more relaxed and spontaneous, probably since team members felt they supported each other. During each focus interview we laughed a lot and I also felt more relaxed. The discussions flowed naturally and in many cases I did not even have to open my question guide.

Bloor *et al.* (2001) suggest the use of focus group interviews for exploratory purposes, which makes it an obvious method of inquiry for this study. Focus interviews were also used in this study for triangulation purposes.

Guidelines developed by Kotler (1991) and Dillon, Maddern and Firtle (1993) were used, and the following principles were followed when conducting the focus group interviews:

- Focus groups were selected to contain no more than twelve and no fewer than five individuals. I found that four was the ideal number of people in my study if I wanted everyone to interact and make his or her voice heard.
- The focus group interview rooms provided relaxed and comfortable settings. Both organisations made available suitable interview rooms.
 These rooms had comfortable chairs; they were private and comfortably air-conditioned.
- No microphones or videotape cameras were used, since their use might have inhibited the participants. Audiotape recorders were used to assist with clear conversation transcriptions. This choice was discussed, negotiated with and explained to each participant.
- Focus groups were identified and selected to be teams working together in a given work environment.

From the researcher's diary.



I acted as the facilitator and was responsible for generating questions and transcribing the responses.

The questions set out in Table 3.3, below, were planned for the focus interviews and included in the question guide.

Table 3.3: Focus interview guide

Definition

Let us make associations....

If I say "team building" you say

I say "team development" and you think......

I say "team work" and you think......

- Let us now discuss your ideas in more detail.
- o What are your views about and experiences of team building consultants?
- What do you like / dislike about team work?

Individual level

- Are you currently part of a team?
- o Please describe your team experiences.
- o Do you have skills to work in a team?
- o Do you prefer to work alone or in a team? Why?
- o Do you know teams in your organisation that are "better" than others? Why would you say is that?

Team level (Group)

- o Have you ever defined your functional role(s) in the team you are part of?
- o Do you know what your team roles are?
- o How would you describe your team?
- o Do you have special team rituals that distinguish you from other teams?
- What are currently the greatest problems and needs that you experience when working in your team?
- What do you as a team do to develop your team optimally?

Organisational (Strategic)

- o What does the organisation's strategy say about team work and development?
- o Are you measured as an individual or a team?
- o Would you say your organisation has a team culture? Please explain.
- Could team training be useful in your organisation?
- O How can the organisation support individuals to become better at team work?

General

- o If you were the leader in charge of "team development" in your organisation, what would you do?
- o If you had to describe "the ultimate approach to team work", what would you say?
- O What would you regard as important elements of a team enablement model?



3.6.3 Pre-interview interventions

Before the actual interviews, many logistical and administrative arrangements had to be made. Once the question guides and questioning strategy had been finalised, the main objective was to get the interviewees into the interview room.

3.6.3.1 Selecting interviewees

As already stated, I used a purposeful sampling strategy. I selected certain individuals myself, but, since I had to make sure I talked to the right people, I also requested top management to nominate individuals who would be in a position to contribute to my field of study. With the list of names in hand, I also had to ensure that the interviewees reflected the bigger population and represented all managerial levels in the organisation.

3.6.3.2 Setting up interviews

Once I had the names, I had to motivate the selected individuals to take part in my study. Apart from telephonic conversations with them, I e-mailed them an outline of my study and formally asked their consent. To my astonishment, no one declined and all showed a sincere interest in assisting me with my research. Some interviewees even mailed me a signed consent form with dates and venues that would suit them. The following is an example of the invitation letter I distributed to all selected participants.

For attention: Alice Muller

Consent Form for Participation in a Research Study: University of Pretoria

The Department of Human Resources,
Faculty of Economic and Management Sciences,
University of Pretoria.

RESEARCH PROJECT: Teamwork in 21st century organisations: understanding the expectations on multiple levels

PhD in Organisational Behaviour

Description of the research

Dear Alice.

You are invited to participate in a research study conducted by Adri Grové under the direction of Dr Yvonne du Plessis of the Department of Human Resources, Faculty of Economic and Management Sciences, University of Pretoria.

The purpose of the study is empirically to determine the success factors of a team development approach in organisations. The findings will provide a better understanding of the integrated role of team development as a tool to develop organisations. The study will add value, as the findings will be used to identify organisational best practices to guide organisations in terms of future team approaches.

Protection of confidentiality and voluntary participation

I wish to assure you that all the information I receive will remain confidential and will be treated in a professional manner. No names will be attached to any data and I will only schedule sessions if you find it convenient. Your contribution to this study is extremely important to me, especially since I am a proud member of the Auditor General.

Your participation

I am conducting qualitative research, which means I chose to use individual or focus group interviews as an information gathering tool.

I am requesting the following:

- Two focus-group interviews with two existing teams (60-90 minutes)
- o Four personal interviews with individuals at management level
- Four interviews with individuals who are not part of the two focus groups

Potential benefits

Once the data have been analysed, the findings will be used to identify practices that will enhance team development approaches in future. The outcome of the research project will be shared with you in detail. In this way, your contribution to the research should benefit you and your institution in future. The value and outcome of the research depends on your willingness and enthusiasm to take part in this project.

Contact information

If you have any questions or concerns about this study or if any problems arise, please contact Adri Grové at 082 455 4733 or via e-mail adrig@agsa.co.za.

| Consent I have read this consent form and have been given the opportunity to ask questions. I give my consent for teams and individuals in the organisation to participate in this study. I also agree to this interview being taped. | | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|
| Participant's signature Date | | | | | | |
| Thank you for participating in this study. | | | | | | |
| Yours faithfully | | | | | | |
| Adri Grové Researcher 2 November 2006 | | | | | | |

3.6.4 Conducting the personal interviews

After I had made all the arrangements, after months of planning and a year of proposals and strategising, it was time for that first interview.

This qualitative interview process was probably the most difficult intervention I have ever undertaken. Since I am a trainer, passionately like people and would describe myself as an effective communicator, I assumed the interviews would be the easiest part of this project. As I entered the room for each interview, I was reminded of the high premium placed in the literature on the technical skills of the successful qualitative interviewer. This probably added to the stress and tension I experienced during each interview.

Emotionally and intellectually, each interview literally drained me. Although I advocated the interview process as "a discussion regarding teams" I found it was far more than that. As both researcher and interviewer, I had to ensure that I played my roles in a defined and objective way. I had to manage the communication process and continuously ensure that we focused on answering the research question and did not stray from the subject. Some interviewees had difficulty expressing themselves in words, others, on the

From the researcher's diary.



other hand, had a lot to say, but the information proved to have little relevance to my research.

Each interview was different, each interviewee unique, each intervention totally in a class of its own.

3.6.4.1 Inside the interview room

Both the focus and the individual interviews were conducted in suitable meeting rooms with air-conditioning, enough natural light and comfortable seating. Before the actual interviews, each participant was briefed and the audiotape recording process was explained. The signed consent form was then filed, the interviewee was offered a drink and I once again explained the confidentiality of the process that would follow after the interview had been conducted. Interviewees were also given the option of stopping the interview at any time if they felt uncomfortable.

3.6.5 Recording the interviews

As has already been mentioned, for ethical and clarity purposes, I decided to audiotape all the interviews while they were being conducted.

Patton (1990:348) describes the use of an audiotape recorder in qualitative interviewing as "indispensable". However, Lincoln and Guba (1988:241) do not generally recommend making any recordings during interviews, "except for unusual reasons". They base their recommendation on the intrusiveness of recording devices, as well as the possibility of the failure of the technology involved.

I decided to make audiotape recordings since they would enable me to capture data more faithfully after the interviews. This choice also allowed me to focus my attention on the interview and not on hurried note keeping. Note-keeping, I realised during the first interview, was rather difficult, since I had to make eye-contact, observe behaviour and follow the discussion on an intellectual level. I consequently obtained permission from the individuals and from the focus groups to use audiotape.



3.6.6 Advantages of interviews

The **aim** of in-depth interviews in my research project was to collect richly structured, detailed and person-centred information regarding my research question from one or more individuals, as recommended by Kaufman (1994:123). As a researcher, my objective was to initiate a dialogue about teams with real people and to treat them as human beings, not merely as study subjects. Throughout the data collection phase, I experienced the following **advantages** of in-depth, personal interviews, as well as focus interviews:

- During my interviews it seemed as if the participants were motivated because of the personal contact. Throughout my study, I made the interviewees feel that their responses were truly valued. I explained the interview process in advance, gave them feedback and thanked the participants personally for their contribution to my study. I truly did not interview one "unwilling" or "negative" interviewee.
- This personal contact enabled me to "read between the lines" and observe behaviour that would otherwise have been lost to the research. Throughout the process I observed pauses, sarcasm and body language as possible hints guiding me towards the truth. One interviewee (Interviewee 8:2007) was asked if he truly believed in teamwork. His answer was the following: "Teamwork? [Long pause] ... [no eye contact] I guess it is good since it is part of our strategy." When he was again prompted later, this individual admitted that he thinks that teams are overrated and that he believes that the organisation would be better off focusing on developing individuals. These dynamics would have been lost if there had been no personal contact.
- The material that was obtained from the process was without a doubt rich and detailed, and I was able to probe beneath the surface when investigating issues.

*The interaction between each interviewee and me was phenomenal and I was amazed by the eagerness of the participants to assist me in my quest to find the answers to my research questions.

The total interview process yielded new insights into teams since I had the opportunity to clarify details, ask for examples and customise questions for each specific individual. These insights are shared with the reader in the next chapter.

3.6.7 Disadvantages of interviews

It is not fair to highlight only the advantages of interviews. There were also a number of disadvantages to the interview method:

- The interview process was very time-consuming. To arrange the sessions and find a suitable time for both parties proved to be a logistical nightmare.
 Furthermore, the interviews were conducted at a venue suitable to the interviewee – which implied many hours of travelling from my side. Preinterview personal calls and documentation were also time-consuming and expensive.
- The actual interviews took between one and two hours each to conduct. After this, each interview had to be transcribed word by word. In practice, a one-hour interview comprised approximately 45 typed pages of transcript. After this, the transcript had to be sent back to the interviewee for quality control, and numerous telephone calls had to be made to verify uncertainties in the text. Conducting personal interviews is definitely not for the faint-hearted. It requires dedication, very hard work and focus.
- Large amounts of information had to be analysed and interpreted. The transcribed text was more than 400 pages of rich data that had to be studied and coded.
- The interview process was largely dependent on my personal attributes and skills. As the research process evolved, I realised that interviewing takes practice and experience. I could track the quality improvement in

From the researcher's diary.



each interview and as a researcher I benefited a great deal in terms of personal development and learning.

 Interviews are very expensive if one calculates the time one invests in planning, arranging and conducting them. I spent more than 30 hours travelling between interviews, at least 20 hours on the phone and 30 hours inside an interview room. Transcribing also proved very difficult and extremely time-consuming.

3.6.8 Post interview actions

Conductin20 in-depth personal and four focus-group interviews took effort and a long time. It was intellectually challenging and mentally exhausting.

*I have just downloaded all my interviews electronically and I am faced with 60MB of audio material. Where will I find the energy to make sense of these 18 hour tape recordings? Where will I start?

3.6.8.1 Transcribing the interviews

After each interview, I put my thoughts and observations down into a reflective journal or diary. I then proceed to transcribe the tapes word by word. In some cases, I had to contact specific interviewees again, since I had questions and details that needed to be clarified.

3.6.8.2 Verifying data

As I started re-reading the raw data, I had to be careful not to make assumptions or read meaning into responses that were not intended. I often had to listen to the original audiotapes repeatedly and compare them with the transcribed text. In many instances, I had to contact interviewees to explain remarks or suggestions to me, and also to verify quotes. Once again, this was a very time-consuming and costly process, but it was invaluable in terms of the quality of my research findings.

From the researcher's diary.



3.6.8.3 Thanking participants

Both companies were facing extremely tough deadlines when I first approached individuals for interviews. The Auditor General was in the middle of the PFMA (Public Finance Management Act) cycle, and GijimaAst was preparing for year end. My timing could not possibly have been worse. Nevertheless, not one person was negative or declined my invitation in the end. In a classic example, one of the executives of the Auditor General, who was extremely busy during the PFMA cycle, at first declined, saying: "I wish I could but we are extremely busy with the PFMA." A little later, he sent me this e-mail:

Adri

I would have expected a peacock to be a bit more assertive and at least tried for a second time. Being an owl and having explored the impact on your feathers I have decided to at least try to accommodate you. I know you are very disappointed in me!!

Will 0900 Thursday do?"

This participant proved that a culture of trust, positive attitudes and mutual respect was crucial for an effective research environment. No wonder that Buber (1957) argues that the quality of the relationship between the researcher and the respondent should be a trusting and accepting one.

Since each participant truly supported me and displayed such a positive attitude, I thanked each of them in a personal manner. Each interviewee received a small gift from me, as well as a handwritten letter to express my sincere appreciation for their effort and time.

"It amazed me that such a small gesture had such an impact on the interviewees — I had numerous calls and e-mails to thank me and wish me luck with the outcome of my studies. The gift was small, the message was sincere and yet the response was overwhelming. I once again realised that, even though we are executives and so-called "strong individuals" or "excellent teams" our need for recognition — in whatever small form — remains huge!

3.6.8.4 Quoting interviewees

Throughout the study **confidentiality** and the individual's right to privacy and anonymity were stressed. However, all participants agreed to being quoted in this study – personally and not anonymously. The only prerequisite was that I had to e-mail the relevant material through for their verification.

3.7 DATA REDUCTION

Once the actual data is available (in this case, the transcripts from the interviews), coding, finding themes and clustering are all instances of data selection, reduction and condensation (Denzin & Lincoln, 1998:180).

The transcribed interviews yielded 400 pages of typed text – and then the real interpretative work began. The first step was to classify this raw data, a process that involved breaking up the data into meaningful parts and bringing it together again in a way that made sense. Classifying data is an integral part of analysis. It lays the conceptual foundation upon the basis of which the researcher makes interpretations and explains phenomena.

It was therefore essential to reduce the data in an anticipatory way and to choose suitable instruments, a conceptual framework and questions.

Figure 3.2 (next page) is helpful in explaining how the data was reduced to lead to better understanding.

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From the researcher's diary.



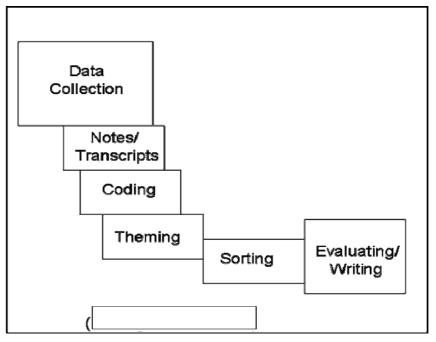


Figure 3.2 : Making sense of the data (adapted from Denzin & Lincoln:1998).

3.7.1 Themes

Boyatzis (1998:1) refers to thematic analysis as "a way of seeing". He defines thematic analysis not as "another qualitative method but [as] a process that can be used with most, if not all, qualitative methods and that allows for the encoding of qualitative information".

Thematic analysis in this case allowed for qualitative research by means of the collection and use of information in a manner that facilitated communication with a broad audience. A theme is a pattern found in the information that describes the possible observations or interprets certain aspects of a research problem. Themes can be identified at the manifest level (in other words, they may be directly observable in the information) or at the latent level (which means it is underlying the phenomenon) (Boyatzis, 1998:4). The emergent themes are discussed in detail in Chapter 4.



3.7.2 Coding the data

"The main reason for coding in qualitative research is the same as that in quantitative research: to structure and facilitate analysis" (Weaver & Atkinson, 1994:31).

Looking for themes in raw data, in this case 400 pages of transcribed interviews, involved coding. Passages of text or other meaningful phenomena had to be identified, and labels had to be applied to them in order to indicate clearly that they were examples of a specific theme. Such a coding or labelling process enabled the retrieval and collection of all the text and other data that were associated with the same theme so that all this information could be examined together and different cases could be compared in that respect.

"Coding can be thought about as a way of relating our data to our ideas about these data" (Coffey & Atkinson, 1996:27). The research challenge was to find a good thematic code that would capture the qualitative richness of the issue under investigation. The thematic code had to meet the following criteria (Boyatzis, 1998):

- a clear label / name;
- a clear definition of the theme;
- a description of how to know when the theme occurs / how to flag the theme;
- a description of any exclusion of the identification of the theme; and
- examples (positive and negative) to eliminate confusion when looking for the theme.

Glaser and Strauss (1967) and Strauss and Corbin (1990) call for open coding as the initial phase in analysis-grounded theory data. Following their description, the data was coded as set out below.

During **open coding**, the focus was on concepts, categories, code notes and memo writing. I worked through all the transcripts and collected numerous illustrative quotes to saturate categories. I asked various "what, where, who, when and how" questions and put data into concepts and categories. I also labelled similar incidents together.



Axial coding involved the refinement of the initial list of categories. This coding formed part of the analytical process. Often, parts of data that were grouped during open coding literally had to be put back together in new ways to make new connections between these categories. Apart from the connections made between categories, causal conditions were also noted.

3.8 USING TECHNOLOGY IN QUALITATIVE RESEARCH

Most qualitative researchers use computers, but relatively few use software designed for qualitative analysis. There are various options available, from the use of SPPS for Windows to the options offered by Weitzman and Miles (1995) which include text retrievers or far more advanced programs.

However, the reason most often cited for researchers' abstaining from the use of specific software programs is that computers and software offer no instant solutions to the problems faced by qualitative researchers. Quite often the data handled by qualitative researchers are particularly resistant to tidy processing methods (Denzin & Lincoln, 1998:211).

Potter (2002:149) suggests that, when data is particularly sophisticated and unstructured "there is little alternative but to rely on the most sophisticated analytical device around, namely, the professional human researcher".

In this study, a word processor was used, because it is basically designed for the production and revision of text and is thus helpful for note-taking, transcribing, writing up or editing interviews. Most word processors have helpful facilities for searching for character strings in the text. Microsoft Word for Windows, for example, allows a researcher to create hypertext links, popup memos and annotations.

Based on the research done and numerous inquiries, I decided to use a software tool called Weft QDA, which was developed specifically to assist with the analysis of textual data such as interview transcripts, documents and field notes. The following guided this choice:



- Weft QDA offers a generic set of facilities for working with text and does not make any assumptions about how to think and generalise from data.
- It is easy to use because it does not focus on "extras", but on basics.
- I was already familiar with the program.
- It is backed up by complete user documentation.
- It is ideal since I was working with text and not images or videos.
- It is fully supported on Microsoft for Windows and is easy to install.

Weft QDA aided me a lot in

- managing various documents, which could be imported and exported quite easily (I annotated my documents with editable memos);
- creating categories (I could categorise and code in terms of a hierarchical pattern, and I could link editable memos to all categories);
- marking (I could record the connection between a category and a passage
 of text by literally "marking" the document section with the category; I could
 also easily retrieve marked text for the comparison and review); and
- obtaining e-mail assistance (when in need, all I had to do was send an e-mail and Alex Fenton, the developer of the system, would come to my aid).

*This was my first "stupid" question regarding the use of Weft QDA.

Fortunately the answer was on a higher intellectual level.

Grove, Adri wrote

Good morning,

I am busy with my PhD thesis and have just discovered Weft QDA. It is a great help to me but my problem is that I have built all the categories etc. and can now not export or print those categories. Is there any way I can print directly from the program?

Regards Adri

Alex Fenton answered

Hi Adri

From the researcher's diary.



There's no way to print directly from Weft. But you can copy and paste the text into another programme (e.g. Word) and print from there, or you can export to an HTML file and print it from your browser.

Regards Alex

3.9 DATA MANAGEMENT, STORAGE AND RETRIEVAL

There are many journals, handbooks, conferences and discussions involving the management and storage of qualitative data. Still, qualitative studies are often vulnerable when it comes to the data management process. Diane Garner, a teacher embarking on qualitative doctoral research, summarises the dilemma as follows (as cited in Ely, 1991:140): "Here one sits, surrounded with stacks of typed and marked field notes, computer printouts, videotapes, analytic memos, scattered and unidentified notes, a file of well-organised index cards and on and on. And here one sits alone."

Without a clear system for storing and retrieving information, data can easily become mislabelled or mislaid. From the outset it was important that a system for data storage and retrieval be designed during the planning stage, long before the actual data collection begins (Boyatzis, 1998). In this study, I consistently kept thorough electronic and manual records as far as possible.

Since the data sets used in QDA are often very large and lengthy and can easily become overwhelming, Lewins (2005) suggests that researchers keep an open mind when faced with the amount of data and organise the data in a systematic manner. In line with this suggestion,

- multiple copies were made of the original data, as the same data may represent two or more themes or analytical ideas; and
- the material was carefully labelled in folders or files so that referring back was easy and re-contextualisation was possible.



3.10 ENSURING RESEARCH TRUSTWORTHINESS AND QUALITY CRITERIA

In order to ensure the trustworthiness of this qualitative study, the points below were borne in mind throughout.

Lincoln and Guba (1988) argue that a researcher can only persuade his or her audience that the inquiry is worthwhile if the research findings are trustworthy. Criteria for trustworthiness in qualitative research that are identified include ensuring credibility, member checking, transferability, dependability and confirmability, and triangulation.

Credibility had to be ensured. Lincoln and Guba (1988) suggest that a researcher should implement a number of strategies to ensure the likelihood that the findings produced are credible. In this case I conducted personal interviews as well as focus-group interviews. I also selected participants representing all organisational levels, diverse individuals with different views and ideas about team work. These were all strategies employed to ensure that the data emerging was credible.

Member checking was used throughout this research project to ensure that respondents verified data and the interpretation of that data. Numerous phone calls were made as to follow up on the actual interviews. A written copy of the findings was also later submitted to participants for their insight and verification.

Transferability also had to be ensured. Qualitative inquiry depends on a presentation of "**solid descriptive data**" or "**thick description**" (Patton, 1990:19) to improve the transferability of an analysis. I truly set out to describe the experiences of participants regarding team work in an empathetic and understanding manner. Hopefully this thick description will attract the attention of future researchers and open up themes for future investigation.

Linclon and Guba (1988) suggest that both **dependability and confirmability** can be determined through a **properly managed audit**. In order to establish dependability, I continuously examined the whole research process, which included the various stages of the research project, as well as the techniques



used to analyse the data. The role of the auditor, in this case my supervisor or study leader, was to establish that the process followed was applicable in terms of the research problem and that consistent process management occurred.

Triangulation is a method used by qualitative researchers to check and establish trustworthiness in their studies and to ensure that there are no grounds for doubting their research results. Based on Guion's (2002) arguments, I used data triangulation in this study. This involved using different sources of information and data. In this case, in-depth interviews were conducted to gain insight into the views of participants and to determine team complexities. The interviews were conducted with individuals, teams and managers. Triangulation happened when the views of all the stakeholder groups were investigated and agreed-upon views were identified. The next chapter illustrates the shared views of the participants.

3.11 CONCLUSION

As has already been explained, the purpose of this inquiry was to understand the expectations employees in 21st century organisations have about teams and teamwork.

I have discussed the methodology I chose to follow, and have justified this choice. I also explained the coding and thematic process, as well as the software package I selected. The next chapter illustrates the themes and subthemes that emerged during this study, and I will now interpret and discuss these themes in detail.