1   Introduction to the research report

1.1   Introduction

The objective of this chapter is to serve as an overall introduction to the research report. This chapter will allow the reader to gain a high level understanding of the background to the research, the focus of the research, how the research was conducted and the structure of the research report.

This chapter provides the background and context against which the research was conducted and then provides the motivation for the research which was undertaken. This includes the presentation of the research problem. The overall research design is then presented and abbreviations used in the research report are detailed. The chapter concludes with an overview of the overall layout of the research report giving a high-level view of the contents of each chapter.

1.2   Background to the research

The background to this research project is comprised of three main aspects. The first of those aspects is the growth of interest that has taken place over the last ten to fifteen years in the subject area of knowledge management (Davenport and Glaser, 2002). Over that period there has been a virtual explosion in interest in the field of knowledge management, as role players and stakeholders have sought to understand the relevance and importance of knowledge management and its relationship to organisational performance. This, in turn, has led to the publication of many books and articles on virtually every aspect of knowledge management (Davenport and Prusak, 1998; Leonard, 1995; Nonaka, 1991; Nonaka and Takeuchi, 1995; Stewart, 1997).

Many different views have emerged as to the nature of knowledge and knowledge management (BSI, 2003b; SAI, 2001) and possible objectives for knowledge management, what they are and how to leverage the possibilities of managing

knowledge as a resource. One particular aspect of knowledge management is the way in which knowledge may be shared (or as some use the term, transferred) between individuals, groups and organisations (Dixon, 2000; Nonaka and Konno, 1998; O'Dell and Grayson, 1998; Sveiby, 2001).

The second aspect of the background to this research concerns the use of stories and storytelling as a knowledge management practice. Part of the search for an improved understanding of how to share knowledge has led to the suggestion that the use of stories and storytelling may provide a powerful practice as part of efforts by individuals, groups and organisations to share what they know. Just as knowledge and knowledge management have been widely discussed, so the issue of the use of stories and storytelling as part of an overall knowledge management strategy has been widely commented on in the literature and by practitioners (Boyce, 1995; Brown and Duguid, 2000a; Denning, 2000; Snowden, 1999a). It has been suggested that the use of stories and storytelling to share knowledge represents a great opportunity to leverage a traditional means of communication and there are a number of examples of how this has been achieved, or how stories might be used, that have been reported over a number of years (Hansen and Kahnweiler, 1993; Kaye and Jacobson, 1999; Sole and Wilson, 2002).

The third aspect of the background to this research is the ever present context of globalisation and the extent to which organisations are faced with the challenges and opportunities associated with taking part in a global business environment. Globalisation has, in turn, prompted many organisations to question the basis on which they can compete both locally and internationally against the best in the world (Faulkner, 2000; Voss, Blackmon, Chase, Rose and Roth, 1997; Waldron, 1999). The growing awareness of the pressure placed upon organisations by their global competitors raises the topic of how to achieve, measure and sustain world-class performance.

It is these three aspects taken together which provide the background to this research project: an understanding of the nature of knowledge management; the potential for the use of stories and storytelling as a practice for sharing knowledge, and the ability

to leverage knowledge, knowledge management and stories and storytelling as part of an overall approach to world-class performance.

1.3   Context of the research

The context in which this research project was conducted had a number of aspects. The first aspect was geographic: the research was conducted in South Africa. At the time that this research project was undertaken (during 2004) South Africa, as a country, was approaching its 10th anniversary as a new democracy, and over the years since the first democratic election was held in 1994, many South African-based organisations had found themselves faced with the opportunity to measure themselves against competitors in a world market which had, prior to 1994, been in many cases partly or wholly denied to them. The post-1994 re-entry of South Africa into the global community prompted a renewed focus on the ability to survive and thrive both within the borders of the country as well as on the international stage.

The second aspect of the context of this research was that it was conducted with the co-operation of a company that operates in the South African mining industry. This industry has traditionally provided a significant source of revenue for the country as well as employment for those working in the industry. However, over recent years, the ability of companies to compete had been influenced by a number of factors (financial, technological, logistical, market-related), which presented both opportunities and threats to organisations operating in the industry.

The third aspect of the context of the research was that this was conducted as a case study investigation into aspects of one particular organisation, Kumba Resources (a company listed on the Johannesburg Stock Exchange and with interests in South Africa as well as a number of other countries), and within that organisation, a particular community of individuals operating across a large proportion of the South African operational locations of the business.

These aspects combined, when positioned against the overall background to the research (as discussed in section 1.2), provide the context against which the research

project was conducted.

1.4   Motivation for the research

Although there has been extensive discussion in the literature regarding the use of stories and storytelling as part of a knowledge management strategy, there has been no formal academic research identified which has been conducted within the context of South Africa, specifically within the mining industry.

Knowledge management is an important issue to organisations (APQC, 2000; BSI, 2003a; de Jager, 1999; Denning, 2000, 2001, 2002, 2004a, 2004b; Liebowitz and Chen, 2004; O'Dell and Grayson, 1998; Snowden, 1999a, 2000b, 2000c), as is the opportunity to share knowledge. When combined with the potential benefits of using stories and storytelling as a practice for sharing knowledge, research into this field appeared to be justified. In addition, depending upon the nature of the research findings, the research may have a significant impact on how knowledge can be shared not only within one organisation (Kumba Resources) or within one industry (the mining industry) but potentially across many industries within the country and within many countries in the world.

The research project offered the potential to better understand the use of stories and storytelling to share knowledge, and to explore the extent to which stories and storytelling may already be in use in the case study organisation; and if so, in what way, as a contributor to world-class performance.

The motivation was therefore at three possible levels: to contribute to the understanding, from an academic perspective, of the nature of the use of stories and storytelling as knowledge sharing practices; to assist the case study organisation in gaining a deeper understanding of its own situation, and to provide valuable learning points which could have a positive impact within both the industry in which Kumba Resources operates as well as the country as a whole.

1.5   Problem statement

The main research problem of the thesis is: "To gain an understanding of the potential of stories and storytelling as knowledge sharing practices to enhance world-class performance in a specific environment."

To address the main research problem a number of sub-problems were identified:

1.5.1   Sub-problem 1

What can be learned from a non-empirical investigation into knowledge management as a context for the research project?

1.5.2   Sub-problem 2

What can be learned from a non-empirical investigation into the use of stories and storytelling as knowledge sharing practices as part of a knowledge management strategy as a context for the research project?

1.5.3   Sub-problem 3

What can be learned from a non-empirical investigation into the nature of world-class performance as a context for the research project?

1.5.4   Sub-problem 4

What can be learned from the use of stories and storytelling to share knowledge as part of a knowledge management strategy within the case study organisation?

1.5.5 Sub-problem 5

How might the performance of the organisation, in terms of the use of stories and storytelling, be enhanced as a result of the application of the findings from the non-empirical research combined with the findings of the empirical research?

1.6 Overall research design

The overall research design was constructed having evaluated a number of possibilities in terms of how the research would be conducted. Having evaluated the context, motivation and problem for the research, it became clear that the overall research philosophy (Easterby-Smith, Thorpe and Lowe, 1991; Hussey and Hussey, 1997; Saunders, Lewis and Thornhill, 2000) to be applied in this research project would be phenomenological rather than positivist.

It was decided to combine both a non-empirical approach as well as an empirical approach in addressing the research problem (Hussey and Hussey, 1997; Saunders *et al.,* 2000). It also became clear, as the research design developed, that it would take both quantitative and qualitative elements (Cavaye, 1996; Darke, Shanks and Broadbent, 1998; Hussey and Hussey, 1997; Leedy and Ormrod, 2001; Miles and Huberman, 1994; Myers, 1997) of the overall approach to the research to best answer the research problem, whilst following a largely deductive approach (Cavaye, 1996; Hussey and Hussey, 1997; Perry, 2001). It was recognised that the research design would entail a subjective approach (Easterby-Smith *et al.,* 1991) due to the nature of the particular research methods selected. Having evaluated a number of possible research methods it became clear that a case study approach would best fit the research problem.

Both qualitative and qualitative data was gathered, using triangulation, to assist in a comprehensive understanding of the nature of the case data (in particular, through a number of interviews, observation and the gathering of artefacts). The overall approach to the conduct of the case study conformed to the recommendations identified in the literature (Cavaye, 1996; Darke *et al.*, 1998; Gillham, 2000; Jensen

and Rodgers, 2001; Perry, 2001; Stake, 1995; Tellis, 1997; Welman and Kruger, 1999; Yin, 1994).

A detailed discussion of the research design is included in Chapter 5.

1.7   Abbreviations

ANSI: American National Standards Institute

APQC: American Productivity and Quality Centre

ASQ: American Society for Quality

AU: African Union

BP: British Petroleum

BPS: Best Practice Sharing

BSI: British Standards Institute

CBI: Confederation of British Industry

CEN: Comité Européen de Normalisation

CI: Continuous Improvement

CICOP: Continuous Improvement Community Of Practice

CKO: Chief Knowledge Officer

CMM®: Capability Maturity Model

CMM-I®: Capability Maturity Model-Integrated

COP: Community Of Practice

CSF: Critical Success Factor

DIN: German National Standards

EFQM: European Foundation for Quality Management

GKEC: Global Knowledge Economics Council

HGMC: Harmony Gold Mining Company

HIV/AIDS: Human Immune Virus/Acquired Immune Deficiency Syndrome

ICOBC: International Council of Benchmarking Co-ordinators

ICT: Information and Communication Technology

ISO: International Organization for Standardization

IT: Information Technology

KBIP: Kumba Resources Business Improvement Project

KM^3®: Knowledge Management Maturity Model

KMAT: Knowledge Management Assessment Tool

KMCI: Knowledge Management Consortium International

KMMM®: Knowledge Management Maturity Model

MAKE: Most Admired Knowledge Enterprises

OHSAS: South African Occupational Health and Safety Standard

PROBE®: Promoting Business Excellence

SA: South Africa

SABS: South African Bureau of Standards

SADC: Southern Africa Development Community

SAEF: South African Excellence Foundation

SAEM: South African Excellence Model

SAI: Standards Australia International

SECAT: Systems Engineering Capability Assessment and Training

SECI: Socialisation, Externalisation, Combination, Internalisation

SEI: Software Engineering Institute

SHEQ: Safety, Health, Environment, Quality

SPICE: Software Process Improvement and Capability dEtermination

STANSA: Standards South Africa

SW-CMM®: Software Capability Maturity Model

SWOT: Strengths, Weaknesses, Opportunities, Threats

TI-BEST: Texas Instruments Business Excellence STandard

TQM: Total Quality Management

UK: United Kingdom

USA: United States of America

1.8 Research report chapter layout

1.8.1 Chapter 2

This is the first of three chapters which form part of the non-empirical research.
Chapter 2 investigates the nature of knowledge and knowledge management through a
review of the literature and discusses a number of specific aspects of knowledge

management: definitions; objectives and success factors; models and frameworks; processes and sub-processes; knowledge management roles; practices and tools, and strategy.

1.8.2   Chapter 3

Here is presented a non-empirical investigation into the nature of stories and storytelling, particularly within the context of organisations. This understanding of the nature of stories and storytelling is then focused more narrowly on the application of stories and storytelling as part of a knowledge management strategy. This provides an understanding of the second aspect of the context against which the empirical research activities were conducted.

1.8.3   Chapter 4

This is where the meaning of world-class performance is explored through the use of a proposed framework. Each element of the framework is explored in turn, in terms of understanding the element of the framework and particularly as it applies to a knowledge management strategy. The results of this non-empirical investigation are used as the third and final aspect which is brought to bear on the case study empirical investigation.

1.8.4   Chapter 5

This chapter explores the possible alternatives and preferred research methodology options to be used in the conduct of the research project. This chapter has three main sections: research philosophy; research approaches, and research design or strategy. It is through the application of the choices made in terms of the overall methodology that this research project was conducted.

1.8.5   Chapter 6

This chapter has four main sections, each of which presents elements of the empirical data which was gathered during the research project. The empirical research period was initiated in October 2003 with a meeting with Kumba Resources management and concluded with feedback to the company in February 2005, with the data collection activities conducted during 2004.

The first section serves as an introduction to the case study organisation, Kumba Resources. The second section looks at the Kumba Resources knowledge management team (also known as the knowledge management department or function) and provides introduction to the Continuous Improvement Community of Practice (CICOP) that was the main focus of this research project. The next two sections in the chapter present the quantitative and qualitative data that was gathered during the empirical research activities. This data was gathered during interviews (structured, semi-structured and unstructured), through observation by the researcher and through the gathering of artefacts (including documents supplied by the Kumba Resources individuals involved in the case study as well as from a number of other sources, for example, internal Kumba Resources publications and the Kumba Resources website).

1.8.6   Chapter 7

An analysis of the data presented in Chapter 6 is to be found in this chapter. The analysis is conducted with reference to the findings of the non-empirical research (which was covered in Chapters 2, 3 and 4). The analysis is conducted at multiple levels: for Kumba Resources as a whole; the Kumba Resources knowledge management team; the CICOP, and the use of stories and storytelling as knowledge sharing practices within the Kumba Resources CICOP.

1.8.7   Chapter 8

The final chapter in this research report reviews the extent to which the research problem was answered, presents recommendations and identifies some potential areas for further research. These include topics which arose during the research but which would require more in-depth analysis or additional research.

1.9   Summary

This chapter has served as an overall introduction to the research project. The background and context to the research, combined with the motivation and research problem provide an understanding of what was to be achieved during this research project. The next chapter is the first of three chapters which present the results of the non-empirical research, starting with the nature of knowledge and knowledge management.