
**THE APPLICATION OF THE BALANCED SCORECARD
AS A MEANS OF MEASUREMENT OF BUSINESS
ACTIVITIES**

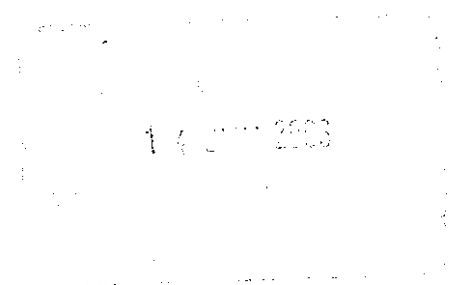
Brett Deacon Blackbeard

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Study leader: Dr T.G. Pelsler

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VOORWOORD

Die Gebalanseerde Telkaart is 'n eietydse instrument om die bestuur van werkverrigting en strategiese belyning te bewerkstellig. Dit is vroeg in die twintigste eeu deur Kaplan en Norton ontwikkel en tot 'n hoogtepunt gevoer met die publikasie van "The Balanced Scorecard" in 1996. Hierdie program vir werkverrigtsbestuur verskil van ander, dat dit 'n benaderingswyse is, vanuit veelvoudige perspektiewe om voortgesette, volhoubare groei te verkry. Eintlik dit moet gesien word as 'n strategie-samestellingsstelsel eerder as bloot 'n metingstelsel.

Die Gebalanseerde Telkaart is reeds wêreldwyd aanvaar en daar word bereken dat die helfte van die Fortune 1000 - maatskappye Gebalanseerde Telkaarte in een of ander vorm in plek het. Hierdie benadering het ook in Suid-Afrika aanhang gevind en verskeie belangrike maatskappye, soos De Beers en Telkom het Gebalanseerde Telkaarte geïmplementeer of is besig om dit te implementeer.

Hierdie verhandeling fokus op die uitwerking van die Gebalanseerde Telkaart op 'n strategiese besigheidseenheid in die Anglo American Groep. Dit is gedoen om die Gebalanseerde Telkaart in Suid-Afrikaanse konteks waar te neem en om die invloed daarvan op die sukses van die strategiese besigheidseenheid te boekstaaf.

Die hoop bestaan dat hierdie verhandeling as grondslag sal dien vir 'n vollediger studie oor die uitwerking van die Gebalanseerde Telkaart op Suid-Afrikaanse maatskappye, met die moontlikheid dat dit in die toekoms aangepas kan word by Suid-Afrika se eiesoortige besigheidsmilieu.

PREFACE

The Balanced Scorecard is a contemporary performance management and strategic alignment tool, developed by Kaplan and Norton in the early 1990s and culminated by the 1996 publication 'The Balanced Scorecard'. The Balanced Scorecard differs from other performance management programmes in that it is a multi-perspective approach to achieving long term sustained growth and should be viewed more as a strategy formation system than a pure measurement system.

The Balanced Scorecard has gained acceptance world wide and it is estimated that half of the Fortune 1000 companies have Balanced Scorecards in one form or another in place. This approach has also gained favour in South Africa, and several notable South African companies have implemented or are implementing Balanced Scorecards, examples of these are De Beers and Telkom.

This dissertation focused on the effects of the Balanced Scorecard on a strategic business unit within the Anglo American Corporation. This has been done in order to observe the Balanced Scorecard in a South African context and to record the influence the Balanced Scorecard had on the strategic business unit's success.

It is hoped that this dissertation may provide the basis for a more complete study of the Balanced Scorecard's effects on South African companies, with the possibility existing of someday adapting the Balanced Scorecard to South Africa's unique business environment.

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CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

1.1 INTRODUCTION

“Measurement leads to control and eventually to improvement, if it cannot be measured it cannot be understood, if not understood it cannot be controlled, if not controlled it cannot be improved.” (Harrington, 1986:5).

One of the crucial issues in making a performance management system effective is the type of mechanism, which is used to measure performance. This has to break away from the old appraisal system approach. There are many ways of achieving this, but the Balanced Scorecard developed by Robert Kaplan and David Norton in the early 1990s has proved to be one of the most popular. Indicated by the fact that an estimated forty percent of fortune one thousand companies used the Balanced Scorecard in one form or another by the end of the year 2000 (McLemore, 1998). This figure has since grown to approximately 50%, showing that its popularity has further increased in recent times (Salterio and Webb, 2003:39).

Kaplan and Norton's aim was to produce a more balanced system of measuring business performance than simply using short-term financial gains. They believe that no single measure can be a valid indicator of performance, so they use four basic categories of measures (Kaplan and Norton, 1992:71-79):

- The financial perspective - how should the company appear to shareholders?
- The customer perspective - how does the organisation appear to customers?
- The internal perspective - what business processes must the organisation excel at?
- The learning/growth perspective - how does the organisation sustain its ability to change and improve?

Targets and results for these four perspectives are typically presented to senior managers on a single sheet of paper, providing a quick but comprehensive and

balanced view of performance with the aim of taking the inscrutability out of implementing company strategies (Kaplan and Norton, 1996:9).

The main strength of this approach is that it is potentially all encompassing, combining financial and non-financial goals and measures. It can encompass the performance of an entire company or business unit, not just the individual investments or projects. The Balanced Scorecard is future-oriented, not a rearview mirror of past performance according to Anthes (2003:34).

Arthur Schneiderman, an independent business process management consultant in Boxford Massachusetts, says that there are many different types of Balanced Scorecards, and they serve many different purposes. But most organisations will say its purpose is to link strategy to action (Schneiderman 1999:1-11).

The Balanced Scorecard is based on several underlying notions according to Schneiderman (1999:1-11). The first is that financial measures alone are not sufficient to size up the health of a company and, that a single minded pursuit of financial objectives could lead a company to ruin in the long run due to short sightedness. The second is that the Balanced Scorecard focuses on processes and not on metrics alone. As such, it is forward-looking and looks at how the organisation can retain its best customers, rather than looking back at what the organisations earnings per share was in the last quarter. Thirdly the scorecard is an analytic framework for translating a company's vision and high level business strategies into specific, quantifiable goals and for monitoring performance against those goals. This methodology breaks high-level strategies into objectives, measurements, targets and initiatives.

Thus the Balanced Scorecard is a performance measurement tool, which is based on the fact that measurement motivates behaviour, and in essence facilitates the creation of long-term value for the business (Anthes, 2003:34).

The term Balanced Scorecard will be represented in this text in three forms: firstly, by its full name "Balanced Scorecard" when describing technical aspects; secondly as a "Scorecard" when describing its application in the Trainer Development strategic business unit (SBU) and lastly as BSC in tables and figures.

1.2 PROBLEM STATEMENT AND SUBSTANTIATION

1.2.1 Problem statement

Kaplan and Norton's Balanced Scorecard is increasingly gaining favour world wide as an effective performance management, measurement tool. This study aims to prove or consequently disprove, whether the Balanced Scorecard provided any significant business advantage to the Trainer Development SBU at Maccauville; part of the Anglo American Corporation. If the Balanced Scorecard is proved to be viable, the possibility for investigating the wider application for the Balanced Scorecard in the Training and Development sector of South Africa will be examined.

1.2.2 Substantiation

A formal business plan including a strategic plan is an important step in creating a successful organisation. However, if the strategic plan cannot be put into practice, the organisation will most probably fail. This situation can be solved through an effective performance management system, where measurement of business activities forms the backbone of the system (Van Hoek, Schonken and Watt, 1998:24-28). The purpose of this dissertation is to emphasise the need for proper measurement through using the Balanced Scorecard as the basis for performance management and business activity measurement.

Owing to a non-emphasis and possibly the past isolation of the South African economy, performance management, in particular holistic business measurement with the aim of aligning the company with a common set of objectives (strategy), has not received its due attention. This is not just true within small to medium size organisations but also within the large conglomerates. The primary reason for measurement being highlighted presently is that the market place as a whole is becoming a far more competitive place, where the gap separating the market leaders from the competition is becoming smaller. This is occurring on both a local and international level; whereby South African companies, now more than ever, need to be able to compete with foreign companies. Thus South African companies need to make the most of their resources and through performance management, to meet their strategic objectives by maximizing their

outputs. According to Schneiderman (1999:1-11) all surviving companies have made improvement to the obvious areas, however the market leaders are those companies who have improved the less obvious and hard to measure areas of operation. The Balanced Scorecard is good at bringing these less obvious breakthrough areas to attention.

Effective performance management can not occur unless a clear system is put into place, whereby performance can be measured on a holistic basis. This can be achieved through using the Balanced Scorecard (Kaplan and Norton, 1996:2). The Balanced Scorecard translates a company's vision and strategy into a coherent set of performance measures (Van Hoek, Schonken and Watt, 1998:24-28).

The Balanced Scorecard approach of business measurement has gained in popularity since its mainstream inception in 1996. Research indicates that approximately 50% of fortune 1000 companies make use of the Balanced Scorecard in one form or another (Salterio and Webb, 2003:39). Taking this into consideration, research and adaptation of the Balanced Scorecard for South African conditions would be a worth while undertaking.

1.3 RESEARCH AIMS AND OBJECTIVES

1.3.1 Primary objective

This study concerns itself with the assessment of the application of the Balanced Scorecard in a specific strategic business unit (SBU): the Trainer Development SBU of Maccauvlei (Anglo American Corporation), which is within the training and development sector of South Africa. The objective is to determine the nature of the Balanced Scorecard and the advantages gained by using it within this SBU.

1.3.2 Secondary objectives

The following secondary objectives have been incorporated into this study:

1. To determine why and how the Balanced Scorecard was conceived.
2. To indicate how the Balance Scorecard fits into performance management.
3. To determine what the components of the Balanced Scorecard are and what these components consist of.
4. To provide an in depth look at the Balanced Scorecard as a method of measurement, its procedures, various measures (financial and non-financial) and techniques for its application.
5. To determine and demonstrate how a Balanced Scorecard is implemented.
6. To determine what pitfalls can cause a Balanced Scorecard to under achieve.
7. To determine both the tangible and intangible value derived from the Trainer Development SBU Balanced Scorecard.
8. To determine if the Trainer Development SBU had any significant advantage over the Training and Development SBU at Maccauvillei, through having a Balanced Scorecard in place.
9. To determine if there is any evidence to suggest that the Balanced Scorecard is applicable on wider stage i.e. the training and development sector and business in South Africa as a whole.
10. To determine if there is any evidence to suggest that the Balanced Scorecard can be further adapted and refined to South African business conditions.

1.4 RESEARCH METHODOLOGY

1.4.1 Analysis of the literature sources

In this analysis the methods, strategic frameworks, operational functioning, benefits, weaknesses and competitive advantages derived from the Balanced Scorecard, will be

analysed more profoundly. This will be then evaluated, integrated and used in the line of argument.

More specifically, secondary objectives 1 to 4 of the study will be achieved by focusing on the first part of the literature review, while secondary objectives 5 and 6 will be covered in the second part of the literature review. The rationale identified in objectives 7 to 10 will be substantiated and refined through the research design for the empirical phase of the study.

The guiding literature to be used in this study is as follows:

Kaplan, R. S. and Norton, D. P. 1992. *The Balanced Scorecard - Measures That Drive Performance*. *Harvard Business Review*, 70(1): 71-79, Jan-Feb.

Kaplan, R. S. and Norton, D. P. 1993. *Putting the Balanced Scorecard to work*. *Harvard Business Review*, 71(5):134-137, Sep-Oct.

Kaplan, R. S. and Norton, D. P. 1996. *The Balanced Scorecard: Translating strategy into action*. Boston, Mass. : Harvard Business School Press. 311 p.

Van Hoek, C. Schonken, S. and Watt, D. 1998. *Module 1: Building a performance culture*. Maccauvlei training and conference centre. 28 p.

1.4.2 Empirical investigation

1.4.2.1 Design

A focus group was used, consisting of the secondary and top management level of the Trainer Development SBU. This focus group was analysed to ascertain the effectiveness and value of their SBU Balanced Scorecard as a performance management tool.

These results were then compared to a control group's results to validate the focus group's results, by negating the effects of certain internal and external environmental

variables. The control group is made up of the top and secondary management level of another SBU at Maccauvlei: the Training and Development SBU. The reason for choosing this SBU is based on it not having a Balanced Scorecard in place and it exists in a similar environment as the focus group through being in the same industry sector, offering similar products and having the same parent company.

1.4.2.2 Method

The secondary management level of the focus and control group were divided into two sample groups, A and B respectively. The sample groups were then required to complete a questionnaire relating to the implementation, participation, attitude and tangible/intangible benefits related to the usage/non-usage of the Balanced Scorecard within their SBU.

Secondly, the sample groups were required to complete a short theory examination in order to determine their relative knowledge of the Balanced Scorecard and if this is sufficient to imply that Balanced Scorecard methodology is being used in day to day SBU operations.

Thirdly, the manager of the focus group i.e. Trainer Development SBU, participated in a structured individual interview in order to determine his opinions on the viability of the Balanced Scorecard as a performance management tool.

Finally, a financial review was undertaken for the period of 2000 to the projected current year 2005, for both the focus and control group. This was to determine whether there are any financial trends indicating that an advantage existed for the SBU that made use of the Balanced Scorecard.

1.4.2.3 Research instruments

A questionnaire relevant to showing the value of the Balanced Scorecard was employed for Sample Group A and B. The questionnaire covered the following issues:

- Implementation of the Balanced Scorecard.

- Degree and levels of participation in forming the Balanced Scorecard.
- The group's attitude towards the Balanced Scorecard.
- Tangible results achieved through Balanced Scorecard implementation e.g. profit.
- Intangible results achieved through Balanced Scorecard implementation e.g. motivation.

A theory examination was given to Sample Group A and B where information deemed essential to being able to understand, implement and use the Balanced Scorecard formed the questions. This was based on Kaplan and Norton's writings on the subject.

A structured individual interview, containing mostly opinion generating questions on the Balanced Scorecard use in the focus group for the period 2000 to 2005, was given to the manager of the Trainer Development SBU. Here the interviewer attempted to derive the tangible and intangible benefits derived from the SBU scorecard.

Finally, a financial review was undertaken for the period of 2000 to the projected current year 2005, for both the focus and control group. This was undertaken according to the following measures:

- Return on investment (ROI)
- Revenue generated per financial year (profitability)
- Revenue growth per annum
- Cost reduction productivity (efficiency)

1.4.3 Data processing

The data analysis was done in the form of descriptive statistics, in order to reach a conclusion as to whether the Balanced Scorecard provided any significant advantage to the Trainer Development SBU.

1.4.4 Expected outcomes

Properly implemented Kaplan and Norton's Balanced Scorecard, promotes company or strategic business unit strategy alignment through providing a framework to set and

measure both financial and non-financial objectives making it advantageous to business activity.

1.5 CLASSIFICATION OF CHAPTERS

Chapter 1, the introduction and problem statement begins, with a description of the necessary elements and the basis on which the study is based. Chapter 2 concerns itself with the definition, development, benefits and components of the Balanced Scorecard; this represents the first part of the literature review. Chapter 3 forms the second part of the literature review and concerns itself with the building and implementing of a Balanced Scorecard. Chapter 3 concludes with a brief section on the guidelines that should be adhered to, to avoid Balanced Scorecards not fulfilling their purpose. Throughout the literature review the focus group of this research, the Trainer Development SBU is used to provide examples and illustrations.

Chapter 4 focuses on the methodology used to determine the value of the Balanced Scorecard in the Trainer Development SBU by using a similar SBU in the same company which does not use a Balanced Scorecard as a control group. Chapter 5 represents the results from the research and provides the scientific basis by which the suggestions in Chapter 6 will be formulated.

Thus the final chapter is Chapter 6; here the literature review section is briefly summarised, as are the results obtained from the research, these are then used to formulate recommendations regarding the application and use of the Balanced Scorecard.

1.6 LIMITATIONS OF THIS STUDY

Being a dissertation of limited scope with a specific research target population of two strategic business units, the findings of this research can therefore only be viewed as an indicator of the applicability and value of Kaplan and Norton's Balanced Scorecard in wider settings, like the Training and Development sector or even South Africa as a whole.

1.7 SYNOPSIS

The Balanced Scorecard is generally classified as a performance management tool where it is often limited to a measurement framework that encompasses both non-financial and financial measures.

For the purpose of this study, the Balanced Scorecard will be viewed as both a performance management and strategic management tool. This is based on the Balanced Scorecard's ability to summarise and formulate through its construction the strategic objectives that a company should reach to achieve its vision. While through its structure enhancing performance management by aligning the whole company with a single set of objectives that can be translate into production level goals with the appropriate measures being put into place to ensure goal achievement.

This study aims to form part of the body of evidence to indicate that there is a basis to prove that the Balanced Scorecard can add value to South African companies and their strategic business units.

CHAPTER 2

THE BALANCED SCORECARD

2.1 INTRODUCTION

"As globalisation continues and electronic commerce expands, the marketplace is not as forgiving as it used to be," says Matt Kolb, senior manager with Arthur Andersen LLP (Limited Liability Partnership) in Dallas (McLemore, 1999:1). According to McLemore (1999:1), this simply means that businesses can not make as many mistakes as in the past. To survive managers need to be keenly focused on everything that can affect the company's success and to do this financial measures alone are no longer sufficient. Thus it has become increasingly difficult to sustain an advantage and remain ahead of competitors. According to Beinhocker and Kaplan (2003:71-76), senior executives usually agree that creating strategies is an integral part of their work and most organisations invest considerable time and effort in formal strategic planning processes to avoid making mistakes.

However strategies provide little benefit to the organisation, unless there is an integrated system to form, implement and measure the success of these strategies. This field of business management is loosely known as performance management. Within the field of performance management, currently one of the most popular tools or systems, is the Balanced Scorecard developed by Kaplan and Norton (1992:71-79). It has been estimated that 50% of fortune 1000 companies use the Balanced Scorecard in one form or another (Salterio and Webb, 2003:39).

The following two chapters will deal with the evolution and development of the Balanced Scorecard and how the Balanced Scorecard has been implemented in the Trainer Development strategic business unit (SBU) which resides under the Maccauvlei Training and Conference Centre, part of the Anglo American Corporation.

2.2 THE BALANCED SCORECARD AND PERFORMANCE MANAGEMENT

2.2.1 Definition of the Balanced Scorecard

The Balanced Scorecard, developed by Robert Kaplan and David Norton (1992:71-79) in the early 1990s, is a strategic management tool that provides the manager with a clear and concise picture of the business's health and progress in reaching the goals of the business. It was originally developed to improve the alignment of measures with strategy and thereby to assist in monitoring the success of implementing strategy. In that regard, Kaplan and Norton (1996:2) liken the Balanced Scorecard to that of an aeroplane's cockpit controls, where the Balanced Scorecard like the instruments of an aeroplane give a snapshot of where a company is heading and what needs to be done to get there.

The Balanced Scorecard addresses the basic aim of financial profit, the cornerstone of every business, by revealing the drivers to creating long-term financial and competitive performance through investment in areas such as: employees, customers, partners and technology amongst others (McCann, 2000:36-37). It also aims to close the gap between the business's strategic vision and its day-to-day operations and decision making (Towle, 2000:12-15). The Balanced Scorecard achieves this by linking both financial and non-financial performance measures to the business's vision and strategy. This is necessary as within accounting's existing paradigm of classification, intangibles or non-financial measures are not recorded. What the Balanced scorecard does well is derive useful performance enhancing information from these intangibles, and links it to standard accounting measures (Grojer, 2001:695).

Thus the Balanced Scorecard is a set of financial and non-financial measures relating to a company's critical success factors. It is an attempt to capture the essence of the organisation's critical value-creating activities (Chow, Haddad and Williamson, 1997:21-23) and has integrative components that reinforce one another in indicating what the current and future prospects of a company will be. Thus its purpose is to concentrate corporate focus on performance measurement innovation, since traditional reporting systems are not able to measure performance in the new manufacturing environments

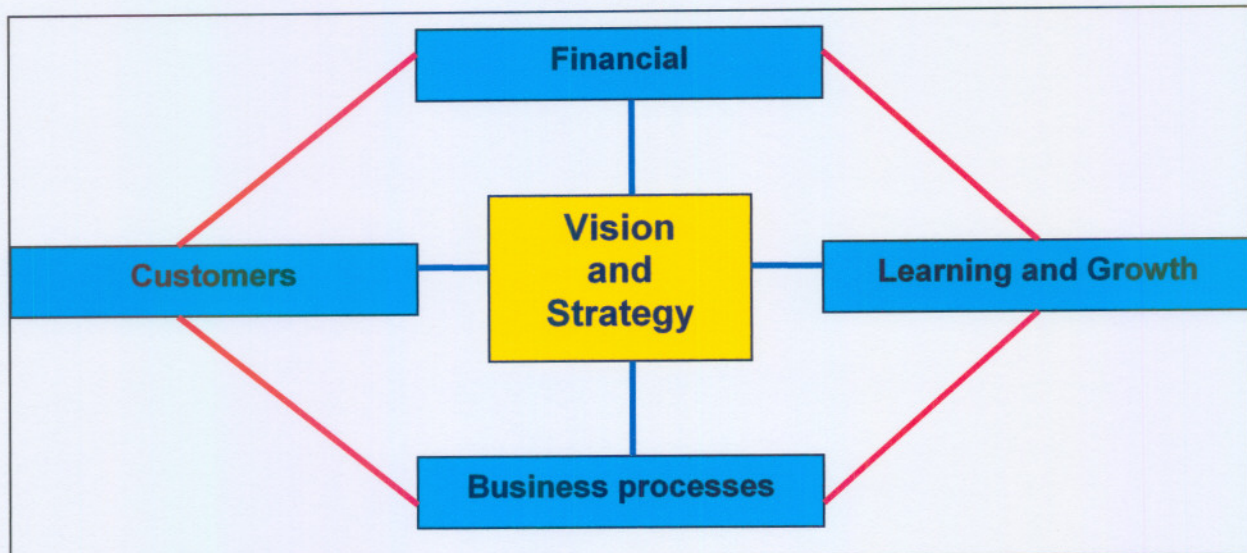
and are not helpful in increasing market share and profit. This measurement is done through giving managers important information from four different perspectives, which together offer a holistic view of the business's health. It also allows managers to consider all of the important strategic measures at the same time, letting them see whether improvement in one area is achieved at the expense of another. (Kaplan and Norton, 1992; Butler *et al.* 1997).

The four perspectives as identified by Kaplan and Norton (1992:71-79) are:

1. The financial perspective which looks at how the business's strategy is affecting the bottom-line. Therefore traditional measures such as growth, profitability and shareholder value are monitored. A number of goals are derived from this area of the Balanced Scorecard.
2. The customer perspective relates to "How do existing and new customers view and value us?" (Kaplan and Norton, 1992:71-79). The answer to this question requires customer involvement, as they need to identify their expectations of the firm and how they measure the firm's ability to achieve their goals. Newing (1995:22-23) emphasised, that for most organisations the price factor only represents 30% of their customers total cost of acquiring materials or services. Therefore, businesses need to pay particular attention to identifying and understanding their customers' requirements. Another question that should be considered is: how are you affecting your customers' results?
3. The internal business perspective focuses on the processes, skills, competencies and technology of the business and its ability to meet the needs of the customer as well as the potential to add value to customers' businesses.
4. The learning and growth perspective focuses on the business's ability to change, improve and adapt their products and processes, as well as the ability to develop and introduce new improved products and services (Kaplan and Norton 1992:71-79). The business must set targets that respond to continuous change in customer needs (Newing, 1995:22-23).

Figure 2.1 indicates the framework and structure of the Balanced Scorecard:

Figure 2.1 The Balanced Scorecard Framework.



Source: Kaplan and Norton, (1996:9).

From Figure 2.1 it is clear that the Balanced Scorecard approach places the business's vision and strategy firmly in the middle of the scorecard to ensure that focus is not lost. The business's goals (strategic objectives), each with its stated measures and drivers of success, are then allocated to one of the four perspectives of the business.

The absence of goals or abundance of goals in any one perspective would give a quick, visual indication of whether the business is in balance. The links, sometimes causal, between goals in different perspectives should then be examined to better understand the effect one might have on another. This understanding enables a short list of the key drivers of performance to be drawn up.

Identifying the relevant measures is a crucial step in a Balanced Scorecard development (Willyerd, 1997:52-58). Once critical success factors are identified, measures must be established to monitor these. The key concept of the Balanced Scorecard is the inclusion of non-financial indicators, which represent goal attainment and are key to the strategy. Financial indicators are generally considered to be lagging indicators, that is they represent the past and what has been accomplished. They have

limited ability to predict future outcomes. Focusing on these measures increases the focus on the present rather than what needs to be achieved in the future (Kaplan and Norton, 1992:71-79).

In contrast, non-financial indicators are usually lead indicators, that is they inform the manager of likely future performance. For example, the learning of new knowledge and skills is a lead indicator of management's future focus and ability to manage. Without investment in staff learning and personal growth, the business has less ability to cope with and manage change. (Kaplan and Norton, 1992:71-79.)

To design good measures it is necessary to understand what needs to be measured. Therefore, there must be clarity about the criteria required. Measures have to be meaningful to the situation and the people using them, to allow informed decision making. Measures that are aligned to strategic intent provide feedback for management control, they also communicate to all levels of the firm the business strategy. A good Balanced Scorecard tells the story of the business strategy, therefore it can be said that it provides the framework, goals and measures against which a performance management program is undertaken. (Kaplan and Norton, 1992:71-79.)

2.2.2.1 The benefits of the Balanced Scorecard

It has been determined that the Balanced Scorecard approach provides certain tangible benefits to companies and strategic business units that make use of them. These benefits are discussed as follows:

- According to Schneiderman (1999:6), nearly every surviving organisation has made dramatic improvements to the obvious areas. Now, the vital few areas for improvement are much less visible. The Balanced Scorecard helps focus the entire organisation to identify those key areas for improvement through realistic real-time measurement across multiple business perspectives (Kaplan and Norton, 1993:136). Thus the scorecard needs to be a balance of sufficient complexity to make it worth while yet be simple enough to maintain transparency and workability.
- "To paraphrase the old saying, an organisation is no stronger than its weakest

process.” (Schneiderman, 1999:6.) An example of this could be an organisation with a great product, but has inadequate marketing. Customers will never know about the product and the business will fail without the company ever understanding why. The Balanced Scorecard helps a company to identify its weak points through proper measurement. According to Harrington (1986:5), “If it can’t be measured it can’t be improved.”

- The Balanced Scorecard helps make strategy operational by translating strategy into performance and measurement targets (Kaplan and Norton, 1993:135).
- The Balanced Scorecard helps focus the entire organisation on what must be done to create breakthrough performance (Kaplan and Norton, 1993:136). Through using it as a tool to force management to articulate strategy and key success factors, thus focusing their attention on the satisfaction of these key success factors (Epstein and Manzoni, 1997:28-36).
- The Balanced Scorecard can act as an integrating device i.e. an umbrella, for a variety of diverse, often disconnected corporate programs, such as quality, re-engineering, process redesign and customer service (Kaplan and Norton, 1993:135).
- Corporate-level measures can be broken down to lower levels in the organisation so that local managers, operators and employees can see what they must do well in order to improve organisational effectiveness (Kaplan and Norton, 1993:136).
- It provides a comprehensive view that overturns the traditional idea of the organisation as a collection of isolated, independent functions and departments (Kaplan and Norton, 1993:136).
- It maintains a balance between building long range competitive abilities and recognising investors’ attention to financial reports. Thus financial measures are viewed in the larger context of the company’s long range competitive strategies for creating future value through investment in customers, suppliers, employees, processes, technology, and innovation. (Chow, Haddad and J. E. Williamson, 1997:22.)

2.2.2.2 The need for a Balanced Scorecard

Kaplan and Norton (1993:135) further add three implicit reasons why companies need the Balanced Scorecard beyond the benefits mentioned previously. These are as follows:

1. No single measure or set of measures can adequately guide and motivate the current actions that drive future performance.
2. Financial results report past performance but are not adequate predictors or drivers of future performance. Even current financial performance may be distorted by omitting the effects of current actions that have created or destroyed future value. Companies need to balance short term financial performance with long term growth opportunities.
3. Companies must link their strategic objectives to a set of financial and operational measures in order to clarify and communicate the objectives and use them for evaluating performance.

2.2.3 The origins of the Balanced Scorecard

According to Kaplan (1998:89-118) the need for improved performance measurement systems had been widely recognised during the 1980s. Many articles, books and conferences documented the limitations of relying solely on financial signals for improving business performance. The adoption of total quality management, just-in-time production systems and synchronous manufacturing all created a demand for improved performance measures that would support companies' continuous improvement initiatives. Therefore, much work had already occurred by 1990, the time when the *Balanced Scorecard* concept initially emerged.

Much of the need for improved operational performance measurements had been satisfied by measures such as part-per-million defect rates, yields, cost of non-conformance, process cycle times, manufacturing cycle effectiveness, throughput times, customer satisfaction, customer complaints and employee satisfaction. What

remained missing was a theory for how the myriad of non-financial performance measures being used on the factory floor could be reconciled with and achieve comparable status to the financial measures that still dominated the agenda of senior company executives. The Balanced Scorecard formed through the following sequence of events is a possible catalyst for this reconciliation. (Kaplan, 1998:89-118.)

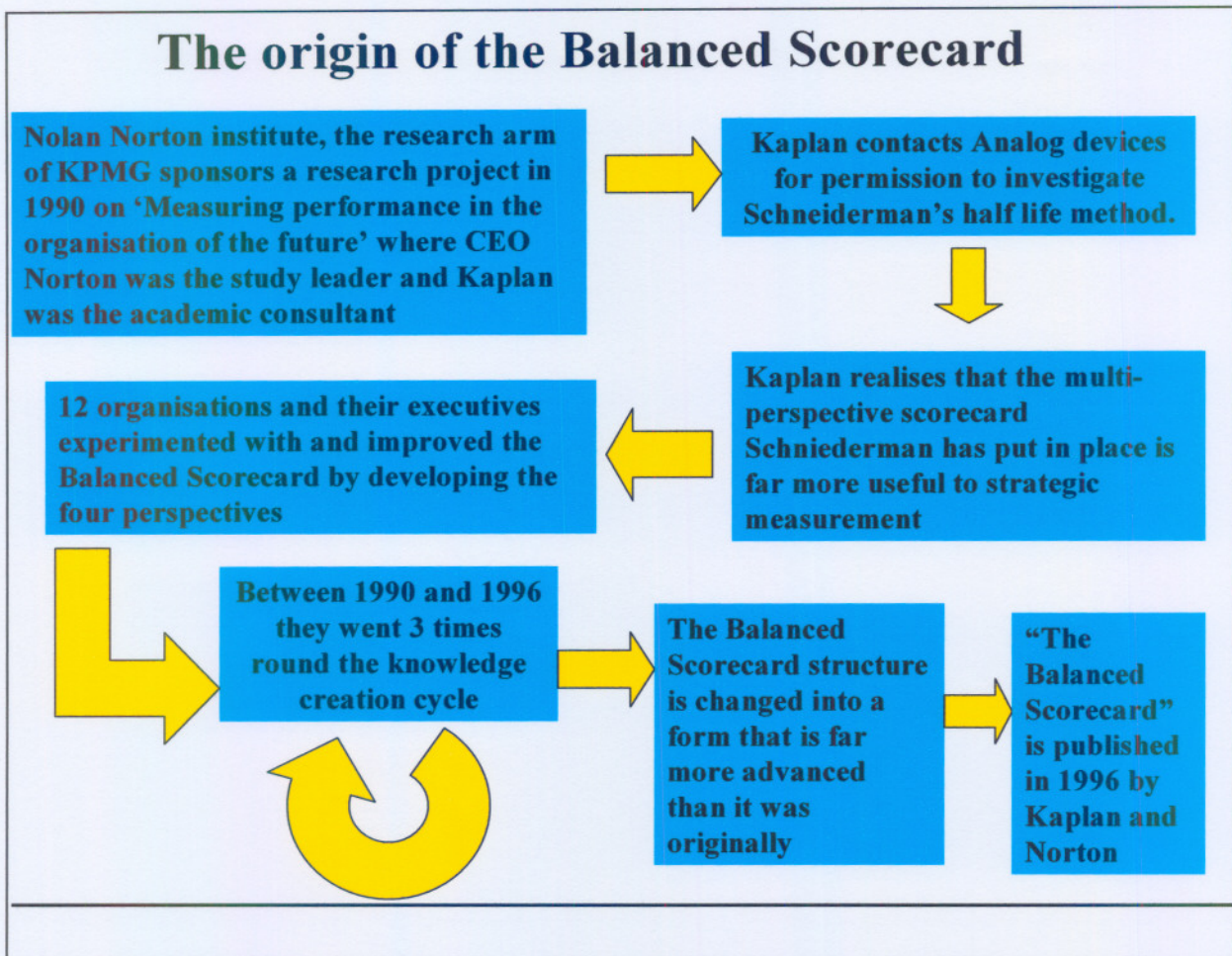
Arthur Schneiderman of Analog Devices contacted Robert Kaplan to assist his company with launching an activity-based costing project. It was learned that Schneiderman had developed an innovative approach, the half-life system, to measure the rate of improvement of his company's TQM program. Kaplan asked for and received approval to visit Analog Devices and write a case about their initiatives. During this visit, Kaplan learned that Schneiderman had also developed and implemented a corporate scorecard that senior executives were using to evaluate the company's overall performance and rate of improvement. The corporate scorecard included, in addition to several traditional financial measures, some metrics on customer performance (principally operational measures related to lead times and on time delivery), internal processes (yield, quality and cost) and new product development (innovation). This corporate scorecard, evolved into what came to be called the Balanced Scorecard. (Kaplan, 1998:109.)

Through Kaplan teaching the Analog Devices case to executives, he quickly learned that Analog's corporate scorecard was of much more interest to them than the half-life method, the original focus of the case. More initial learning came from testing the ideas directly with a set of companies that participated in a year long project on performance measurement with Nolan, Norton and Co. The project attracted senior financial and planning executives from a dozen companies who met on a bi-monthly basis throughout 1990. Analog Devices corporate scorecard captured the interest of the participants. Throughout the year, they experimented with it in their organisations and reported back on the results. This concept proved successful in many of the pilot sites and turned out to be the prime output from the year long research project. In the process, the original corporate scorecard, which focused mostly on operational improvements like lead times, delivery performance, manufacturing quality and cycle times, became transformed into a much more strategic organisational performance measurement system. This consisted of four identifiable perspectives, the financial,

customer, internal business process and innovation and growth perspectives. (Kaplan, 1998:109.)

The Balanced Scorecard implementations that were done at the end of 1995, as integrated strategic management systems, were far more advanced than the initial formulation as a complementary non-financial measurement system at Analog Devices. In the six years 1990 to 1995, Norton and Kaplan had made three cycles around the knowledge creation cycle. The half-life of improvement of the Balanced Scorecard knowledge base was much shorter than for activity-based costing, proving that the Balanced Scorecard had something of value to offer business. (Kaplan 1998:89-118.)

Figure 2.2 The origin of the Balanced Scorecard

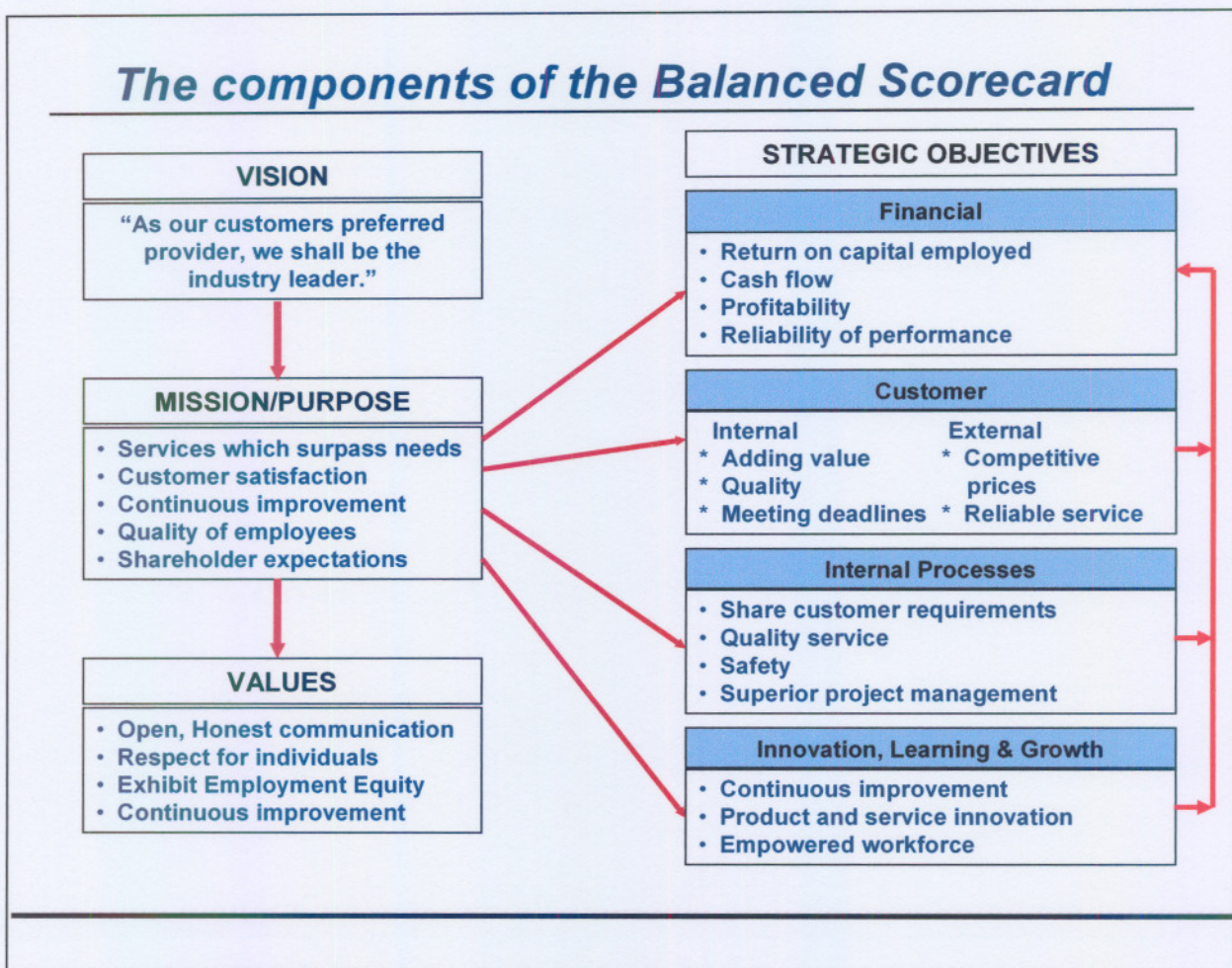


Adapted from Schneiderman, (1996:1) and Kaplan, (1996:vi-xi).

2.3 THE COMPONENTS OF THE BALANCED SCORECARD

The Balanced Scorecard as per Kaplan and Norton (1996:24-29) is made up of four perspectives; these four perspectives are driven by the company vision, mission and values. This ensures that the measures and goal in each perspective are leading the company to its ultimate vision. Within the perspectives the financial perspective is the perspective that all other perspectives are answerable to. Ensuring that the company is still profit-orientated and that each of the non-financial measures (lead indicators) is directly answerable to a financial measure (lagging indicator). Figure 2.3 indicates the relationship between the various Balanced Scorecard components which will now be discussed in more detail.

Figure 2.3 The components of the Balanced Scorecard



Source: Kaplan and Norton, (1993:135).

2.3.1 The business vision

According to Smit and Cronje (1997:143-147), for top management to lead the organisation to success in the future it needs a strong vision. Having a vision implies that managers need to think about ways to carry their organisation into the future. South African managers face the challenge of surviving a global environment in which new technologies and political alignments are important realities.

Smit and Cronje (1997:143-147) indicate that a clear vision is important to an organisation for the following reasons:

1. A vision promotes change, it serves as a road map for organisations as they move through accelerated change, thus it is a vehicle for driving change.
2. A vision provides the basis for a strategic plan.
3. A vision enhances a wide range of performance measures. It has been found that companies with a clear vision statement outperform those companies that do not possess a vision. This should be considered by shareholders when selecting companies in which they can invest.
4. A vision helps to keep decision making in context, it provides focus and direction. Organisations with a clear vision help employees to focus their attention on what is most important to the organisation, discouraging them from exploiting short-term opportunities they may otherwise seize.
5. In South Africa, as well as in other countries, organisations tend to become managerially leaner and flatter; decision making becomes more decentralised. A clear vision can affect the premises that people use to make decisions in the absence of direct supervision
6. A vision motivates individuals and facilitates the recruitment of talent. A vision should enable employees to see how their effort contributes to the organisation's success. The vision should also indicate the attributes valued by organisation, for

example innovation and knowledge.

7. A clear vision has positive consequences. When top management effectively communicates the vision, there is a significantly higher level of job satisfaction, commitment, loyalty, pride, *esprit de corps*, and clarity about the organisations values, productivity and encouragement.

Kaplan and Norton (1996:10-15) agree that a shared ultimate goal or strategy that has gained consensus and translates the direction the organisation wishes to head in, is the starting point from where a Balanced Scorecard can be formed.

The Trainer Development SBU vision conforms to the Maccauvlei vision which is as follows:

“Maccauvlei will be the preferred provider in improving the performance throughout the Anglo American Corporation and Southern Africa by 2005”

(Blackbeard *et al.* 2004:2.)

2.3.2 The business mission

According to Pearce and Robinson (1994:49), the mission can be defined as the *fundamental, unique purpose that sets the organisation apart from other organisations of its type and identifies the scope of its operations in (i) product, (ii) market and (iii) technological terms.*

A mission statement, therefore, provides answers to the questions:

1. What is our business i.e. product?
2. Who is our client i.e. market?
3. How will we provide this product or service i.e. technology?

Pearce and Robinson (1994:49) go on to say the answers to these three questions

should clearly set the organisation apart from similar organisations. A mission statement should ensure unanimity of purpose within the organisation, and serve as the basis for resource allocation. The mission statement also sets the parameters within which all decisions should be made.

The importance attached to re-engineering and total quality management (TQM) in contemporary management emphasises two additional components that should be addressed by the mission statement, namely the customer and quality (Pearce and Robinson 1994:51).

When formulating a mission statement, management should be very sensitive to the claims of stakeholders, both inside the organisation and outside. Inside stakeholders such as employees would like to see their economic, social and psychological needs being addressed in the mission statement. The general public, an outside stakeholder, may want its concern for the conservation of the environment to be addressed in the mission statement, this may form part of the value statement if a value statement is used. (Pearce and Robinson 1994:49.)

Maccauvlei's corporate mission statement which the Trainer Development SBU uses is as follows:

"Maccauvlei meets customer needs by providing integrated performance improvement products and services, delivering a full range of leadership management, supervisory and trainer competencies as well as offering specialist conference facilities." (Blackbeard *et al.* 2004:2.)

2.3.3 The business values

The value statement of a company plays an integral role in how a company achieves its vision and according to Smit and Cronje (1997:102), it also plays an integral role in forming organisational culture i.e. how managers, employees and customers interact and behave towards one another.

Organisations should also address the following components in their vision statement,

or should state them in an addendum to the mission statement if a value statement is not used. This is often referred to as the philosophy of the organisation: (Pearce and Robinson 1994:50.)

1. The organisation's intention to secure its survival through sustained growth and profitability.
2. The organisation's culture (its beliefs and values).
3. The organisation's public image.
4. The self-concept of the organisation (its capabilities - that is, where its strength lies).
5. The organisation's social responsibility towards its internal stakeholders (e.g. employees and shareholders) and outside stakeholders (e.g. the government and general public).

Maccauvlei and the Trainer Development SBU corporate values are as follows:

Maccauvlei subscribes to the principles of strong and ethical corporate governance. Internally and externally we excel in:

1. Customer service
2. Business improvement
3. People development

Furthermore the Trainer Development SBU adds to these values its own set values in regard to employer - employee relationships and relationships with clients, these are as follows:

Key values of the Trainer Development SBU:

1. Relationship building; building relationships and partnerships and promoting collaboration (internally and externally).
2. Staff development; develop staff to full potential and aspirations.
3. Teamness, development of teamwork by open, transparent consultation and valuing people's contributions.

4. Performance; development of a performance ethic focussed on quality, reliability, competence, accountability and performance assessment.

Values employees can expect from the Trainer Development SBU (Blackbeard *et al.* 2004:3.):

1. Clear accountability and authority specification for all roles.
2. Competent managers.
3. Participation in task assignment and policy development.
4. Challenging work to extend individual capacity.
5. Timely feedback on personal effectiveness.
6. Fair differential remuneration based on level of work.

Values the Trainer Development SBU can expect from the individual:

1. Integrity; to behave honestly.
2. Commitment; to devote one's full potential capability and energy to work.
3. Reliability; to be counted upon consistently to do what is expected or required.
4. Initiative; to originate new ideas or methods without being asked.
5. Co-operation; to work together without being asked.

Trainer Development SBU values towards clients:

1. Put client's interests ahead of your own.
2. Do not take on more work than can be serviced.
3. Do not do work you are not qualified to perform.
4. Do not disclose confidential information.
5. Admit to errors.
6. Fully disclose all conflicts of interest.
7. Maintain a fair fee schedule.

According to a communication with Blackbeard (2004), the Trainer Development SBU manager, "The SBU values encompass the spirit of the SBU and propagate a culture in which goals and strategic measures of the Balanced Scorecard will be achieved."

2.3.4 Strategic perspectives

The Balanced Scorecard comprises of four perspectives which Kaplan and Norton (1996:5) believe are generic to all companies. These perspectives are:

1. The financial perspective
2. The customer perspective
3. The internal process perspective
4. The innovation learning and growth perspective

In the following section each one of these perspectives will be discussed in more detail with reference being made to the Trainer Development SBU.

2.3.4.1 Financial perspective

According to Kaplan and Norton (1996:47), building a Balanced Scorecard should encourage business units to link their financial objectives to corporate strategy. The financial objective serves as the focus for the objectives and measures in all other scorecard perspectives. It could be said that the other three perspectives are in essence answerable to the financial perspective. Therefore financial objectives should be set in line with company strategy and need to consider all of the risk involved (Jalbert and Landry, 2003:32-41).

2.3.4.1.1 Linking financial objectives to business unit strategy

Financial objectives can differ considerably in each stage of a business's life cycle. Business strategy theory suggests several different strategies that business units can follow, ranging from aggressive market share growth down to consolidation, exit and liquidation. For simplification purposes Kaplan and Norton (1996:48) identify just three stages, namely the Growth stage, Sustain stage and the Harvest stage.

The Trainer Development SBU can be classified as being in its later growth stage as industry growth in the training and development sector is still continuing for the most part because of government legislation promoting employee development. This

legislation is in the form of the Skills Development Act (97/1998) which attempts to co-ordinate industrial training in a more structured and purposeful manner. Its objectives, amongst others, are:

1. To develop the skills of the South African workforce.
2. To increase the return of such investment.
3. To encourage employers to use the workplace as an active learning environment, so that employees can acquire new skills and new entrants can acquire work experience.
4. To encourage workers to participate in learnerships and other training programmes.
5. To ensure quality of education and training in the workplace.
6. To improve the prospects of those who were previously disadvantaged.
7. To assist work seekers and retrenched persons to find employment.
8. To assist employers to find qualified workers.

The act provides for the establishment of various structures to advise on and regulate industrial training. One such structure is SAQA (South African Qualifications Authority) where SETA's (Sectoral Education and Training Authority) for each industry are formed in order to ensure standardised high quality learning and qualifications (SAQA Act, 58/1995). The Trainer Development SBU falls under the ETDP (Education Training and Development Practices) SETA where the Trainer Development SBU manager is a member of the board. This provides the Trainer Development SBU course products with higher credibility as they are fully registered according to the relevant unit standards and have NQF (National Qualification Framework) ratings. (Bendix, 2001:139-141.)

2.3.4.1.2 Risk management

According to Jalbert and Landry (2003:32-41), effective financial management must address risk as well as return objectives relating to growth, profitability and cash flow. Kaplan and Norton (1996:51) emphasize that businesses should balance expected returns with management and control of risk. Thus many businesses include an objective in their financial perspective that addresses risk dimensions of their strategy, for example diversifying revenue sources away from a narrow set of customers, one or

two lines of business, or particular geographical regions. In general, risk management is an overlay, an additional objective that would compliment whatever expected return strategy the business unit has chosen.

According to Blackbeard (2004), the Trainer Development SBU does not have a particular risk management objective on its scorecard. Risk management is included in its marketing and financial plan, where risk is diffused through broad based marketing, where the course products offered are applicable to any medium to large sized company that undertakes its own human resource development (HRD) in the Southern African region. This diversified marketing is particularly important since in the past it relied heavily on the mining sector, which fluctuated markedly due to the rand dollar exchange rate.

2.3.4.1.3 Strategic themes for the financial perspective

Kaplan and Norton (1996:51-59) have found that, for each of the three strategies-growth, sustain and harvest, there are three themes that drive the business strategy. These are:

- Revenue and growth mix: Which includes new products, new applications, new customers and markets, new relationships and new pricing strategy.
- Cost/reduction/productivity improvement: Which includes increasing revenue productivity, reduction of unit costs, improving channel mix and reducing operating expense.
- Asset utilisation/investment strategy: Which includes the cash cycle, and improving asset utilisation.

Indicated in Table 2.1, are the appropriate measures to use in the financial perspective for each stage in the organisation's life-cycle according Kaplan and Norton (1996:52).

Table 2.1 The measures used in each of the strategic financial themes

Strategy	Strategic theme		
	Revenue growth and mix	Cost reduction/ Productivity improvement	Asset utilisation
Growth	<ul style="list-style-type: none"> • Sales growth rate by segment. • Percentage revenue from new products, services and customers. 	<ul style="list-style-type: none"> • Revenue /employee 	<ul style="list-style-type: none"> • Investment (percentage of sales) • R and D (Percentage of sales)
Sustain	<ul style="list-style-type: none"> • Share of targeted customer and accounts • Cross-selling • Percentage revenue from new applications • Customer and Product line profitability 	<ul style="list-style-type: none"> • Cost vs competitors • Cost reduction rates • Indirect expenses (percentage of sales) 	<ul style="list-style-type: none"> • Working capital ratios (cash to cash cycle) • ROCE by key asset categories • Asset utilisation rates
Harvest	<ul style="list-style-type: none"> • Customer and product line profitability • Percentage unprofitable customers 	<ul style="list-style-type: none"> • Unit costs (per unit output, per transaction) 	<ul style="list-style-type: none"> • Pay back • Throughput

Source: Kaplan and Norton, (1996:52).

As mentioned before, the Trainer Development SBU falls in between the growth and sustain phase, thus the financial perspective on its scorecard consists of objectives and measures from both the sustain and growth phase, indicated in Table 2.1. The Trainer Development SBU financial perspective is represented below in Table 2.2:

Table 2.2 Trainer Development SBU financial perspective

Financial Perspective		
Key objectives	Performance driver measures	Measures
1. Increase revenue	Achieve/surpass budget of R8 805919	<ol style="list-style-type: none"> 1. Revenue per product manager 2. Revenue per product 3. Number of courses facilitated
2. Increase growth	Growth in revenue R 7 00000 or 8.5%	<ol style="list-style-type: none"> 1. Revenue growth per product manger 2. Revenue growth per product 3. % market share 4. % industry growth
3. Reduce costs	Achieve/ go below cost budget R3 600000	<ol style="list-style-type: none"> 1. Cost per product manager 2. Cost per product 3. Total remuneration 4. Total facilities and equipment cost 5. Total administrative cost 6. Total marketing cost 7. Total R and D cost
4. Increase return on investment (ROI)	Achieve ROI of 1.33 in 1	<ol style="list-style-type: none"> 1. ROI per product manager 2. ROI per product 3. ROI from product development

Source: Blackbeard *et al.* (2004:4).

The Trainer Development SBU financial plan for 2004 can be summarised in to the following four points (Blackbeard *et al.* 2004:4):

1. Cost associated with the Trainer Development Diploma (TDD) product needs to be drastically reduced aiming at a return of investment of 1.28 on every rand spent.
2. Cost associated with moderator training needs to be addressed aiming at a return of investment of 1.28 on every rand spent.
3. For 2004 prices will be increased by 7% counteracting inflation.
4. Aim to increase sales by 5% while maintaining costs as per budget

2.3.4.1.4 Summary

According to Kaplan and Norton (1996:61-62), financial objectives represent the long term goals of the organisation: to provide superior returns based on the capital invested in the SBU, using the Balanced Scorecard does not conflict with this vital goal. The Balanced Scorecard can make financial objectives more explicit and customize financial objectives to the business unit in different stages of their growth and life cycle.

Kaplan and Norton (1996:61-62) go on to say that the financial perspective of the scorecard enables senior executives of business units to specify metrics by which long term success of the enterprise can be evaluated; as well as identify the variables considered important to create and drive the long term outcome objectives. The drivers in the financial perspective will be customized by the scorecard to the industry, the competitive environment and the strategy of the business unit.

Eventually, all objectives and measures in the scorecard perspectives should be linked to achieving one or more objectives in the financial perspective. This linkage to financial objectives explicitly recognises that the long term goal of the business is to generate financial returns to investors; and all strategies and programs, and initiatives should enable the business unit to achieve its financial objectives. Every measure selected for a scorecard should be part of link of cause and effect relationships, ending

in financial objectives that represent a theme for the business unit. (Kaplan and Norton, 1996:61-62.)

2.3.4.2 Customer perspective

According to Kaplan and Norton (1996:63), in the past companies could concentrate on their internal capabilities, emphasizing product performance and technology innovation. But now companies that do not understand their customer needs eventually find that competitors can make inroads by offering products or services better aligned to their customers. Thus, companies are now shifting their focus externally to customers. This is primarily done through focus on customer satisfaction and the need to consider the expectations of customers (Jalbert and Landry, 2003:32-41).

In the customer perspective of the Balanced Scorecard, companies identify the *customer and market segment in which they have chosen to compete*. This segment represents the sources that will deliver the revenue component of the company's financial objectives. The customer perspective enables companies to align core customer outcome measures like satisfaction, loyalty, retention, acquisition and profitability to targeted customers and market segments. It also enables them to identify and measure explicitly, the value propositions they will deliver to targeted customers and market segments. The value proposition represents the lead indicator for the core *customer outcome measures and is vital to understanding and satisfying ones customers*. (Kaplan and Norton, 1996:63.)

2.3.4.2.1 Market segmentation

In general existing and potential customers are not homogenous; they have different preferences and values with regard product or service offerings. A strategy formulation process, using in-depth market research, should reveal the different market and customer segments, and their preferences along the dimensions like price, quality, functionality, image, reputation, relationship and service. The company's strategy can then be defined by those customers and market segments that it chooses to target. The Balanced Scorecard, as a description of a company's strategy, should identify the customer objectives in each targeted segment. (Kaplan and Norton, 1996:64.)

The Trainer Development SBU market segmentation is widely based at all medium to large companies that need to train and register their human resource development officers with SAQA in Southern Africa. Withstanding this, there is however still a marketing and program emphasis towards the mining sector, traditionally the Trainer Development SBU's largest customer base. (Blackbeard, 2004.)

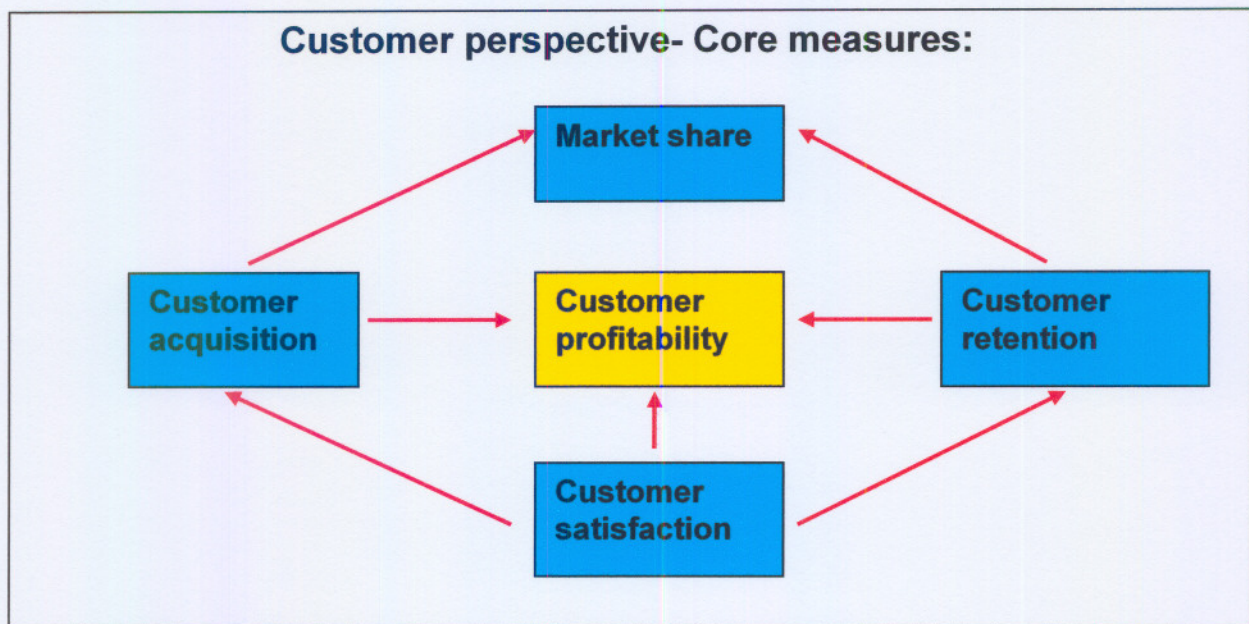
The products offered by the Trainer Development SBU are sequential and have accredited NQF ratings to finally develop trainers, who can train management level skills. Their core marketing is done through the SBU manager presenting at high level HRD conferences and seminars. Brand building is done through course registration with SAQA and the NQF, recognition by higher learning institutes both locally and internationally, and by association with the Anglo American Corporation. (Blackbeard, 2004.)

2.3.4.2.2 The core customer measurement group

Kaplan and Norton (1996:68) subscribe that the core measurement group of customer perspective is generic across all kinds of organisations. The core measurement group includes measures of:

1. **Market share:** Reflecting the proportion of business in a given market (in terms of number of customers, dollars spent, or unit volume sold) that a business unit sells.
2. **Customer acquisition:** Tracks, in absolute or relative terms, the rate at which a business unit attracts or wins new customers.
3. **Customer retention:** Measures, in absolute or relative terms, the rate at which a business unit retains or maintains ongoing relationships with its customers.
4. **Customer satisfaction:** Assesses the satisfaction level of customers along specific performance criteria within the value proposition.
5. **Customer profitability:** Measures the net profit from customers after allowing for the unique expenses required to support that customer.

Figure 2.4 Core measures of the customer perspective



Source: Kaplan and Norton, (1996:64).

Figure 2.4 indicates the core customer measurement group in the customer perspective and how they influence customer profitability. The links between the core customer measurement groups are also indicated.

Table 2.3 indicates the customer perspective in the Trainer Development scorecard. Note that it adheres to the core measurement group by Kaplan and Norton (1996:68).

Table 2.3 Trainer Development SBU customer perspective

Customer Perspective		
Key objectives	Performance driver measures	Measures
1. Customer satisfaction	Repeat sales (70% of total accounts)	<ol style="list-style-type: none"> 1. Response time to customer requests 2. Number of complaints 3. Number of referrals 4. Customer retention
2. Improve customer loyalty	Repeat accounts (70% of accounts)	<ol style="list-style-type: none"> 1. Number of referrals 2. % return business 3. Number of contacts made with existing customers
3. Increase market share	% market share (40% in product segment)	<ol style="list-style-type: none"> 1. Customer analysis 2. Competitor analysis 3. Customer service 4. % New customer acquisition 5. % Customer retention sales 6. % Related product sales

Key objectives	Performance driver measures	Measures
4. Customer acquisition	% new accounts (30% of total accounts)	1. % new customers in each region 2. % new customer from each company 3. % new customer from each industry
5. Customer profitability	1.28 in 1 ROI	1. Cost per customer 2. Net profit per customer

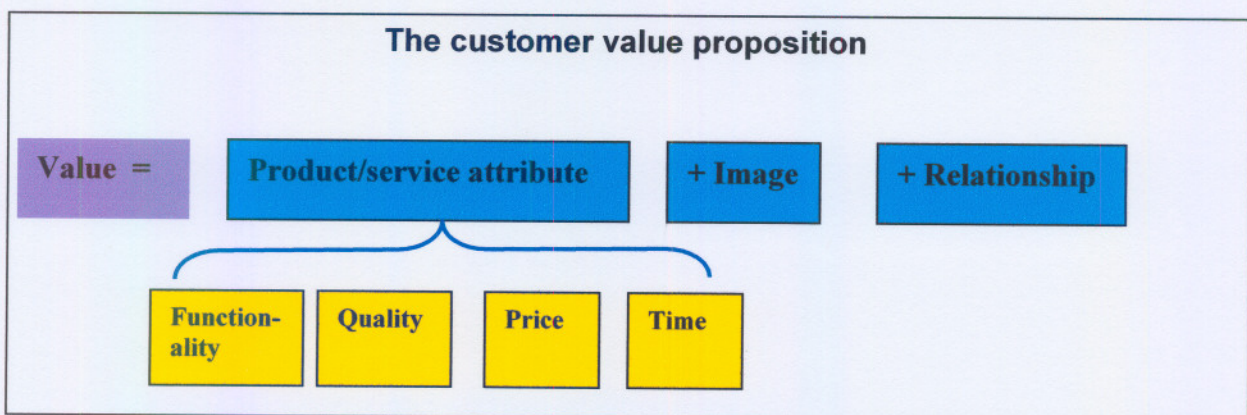
Source: Blackbeard *et al.* (2004:5).

2.3.4.2.3 Measuring the customer value proposition

The customer value proposition represents the attributes that companies provide, through their products and services to create loyalty and satisfaction in their targeted customer segments. The value proposition is the key concept for understanding the drivers of the core measurements of satisfaction, acquisition, retention and market share. The value proposition is a lead indicator of how successful the core customer measures are. The attributes that are common to all value propositions according to Kaplan and Norton (1996:73-84) are as follows:

1. Product and service attributes: This encompasses the functionality of the product/service, its price and its quality.
2. Customer relationships: Including the delivery of the product/service to the customer, including the response and delivery time dimension, and how the customer feels about purchasing from the company.
3. Image and reputation: Reflecting the intangible factors that attract customers to a company.

Figure 2.5 The composition of the customer value proposition



Source: Kaplan and Norton, (1996:74).

The Trainer Development SBU value proposition is represented in Table 2.4.

Table 2.4 Trainer Development value proposition

Category	Value
1. Product and service attributes	<ol style="list-style-type: none"> 1. Fully SAQA accredited and registered HRD trainers, training courses that are recognised by numerous local and international institutes. Courses offered range from entry level NQF4 to training of management NQF6 that are complementary in nature to cross selling. 2. Professional SAQA registered facilitators. 3. In-house professional facilities and accommodation (NOSA 5 star rating). 4. Competitive sector related prices.
2. Customer relationships	<ol style="list-style-type: none"> 1. Flexible to customer needs, will travel and administer out-of-house training. 2. Highest commitment to quality and customer satisfaction
3. Image and reputation	<ol style="list-style-type: none"> 1. Anglo American forms parent company. 2. Fully SAQA accredited and registered courses that are recognised by numerous local and international institutes. 3. Highest commitment to quality and customer satisfaction for the last 25 years.

Source: Blackbeard *et al.* (2004:5).

2.3.4.2.4 Summary

According to Kaplan and Norton (1996:24-29), when formulating the customer perspective, the manager should have a clear idea of their targeted customer and business segments. Then select a set of core outcome measurements namely; share, retention, acquisition, satisfaction and profitability for these targeted segments. These outcome measures represent the targets for the company's marketing, operational logistics and, product and service development processes. But these outcome measures have some of the defects of traditional financial measures. They are lagging measures; employees will not know how they are doing with regard to customer satisfaction or retention until it is too late to affect the outcome. Also these measures do not communicate what employees should be doing in their day to day activities to achieve the desired outcomes. To remedy this, managers should also identify what customers in the targeted segment value, and choose the value proposition they will deliver to these customers. They can select objectives and measures from among the three classes of attributes that if satisfied, will enable the company to retain and expand its business with these targeted customers. Thus the value proposition will act as a lead indicator of the success of the core customer measures. (Kaplan and Norton, 1996:24-29.)

2.3.4.3 Internal processes perspective

The internal business process perspective focuses on the production process and need to be effective and efficient (Jalbert and Landry, 2003:32-41). For this perspective, Kaplan and Norton (1996:92) indicate that managers must identify the processes that are most critical for achieving customer and shareholder objectives. Companies typically develop their objectives and measures for this perspective after formulating objectives and measures for the financial and customer perspectives. This sequence enables companies to focus their internal business process metrics on those processes that will deliver the objectives established in the financial and customer perspectives.

2.3.4.3.1 Internal business process value chain

Each business has a unique set of processes for creating value for its customers and producing financial results. However, according to Kaplan and Norton (1996:96) there is a generic value chain model that provides a template that companies can customize in preparing their internal business perspective. This model encompasses three principal business processes:

- Innovation
- Operations
- Post sale services

In the innovation process, the business unit researches the emerging or latent needs of customers, and then creates the products and services that will meet these needs.

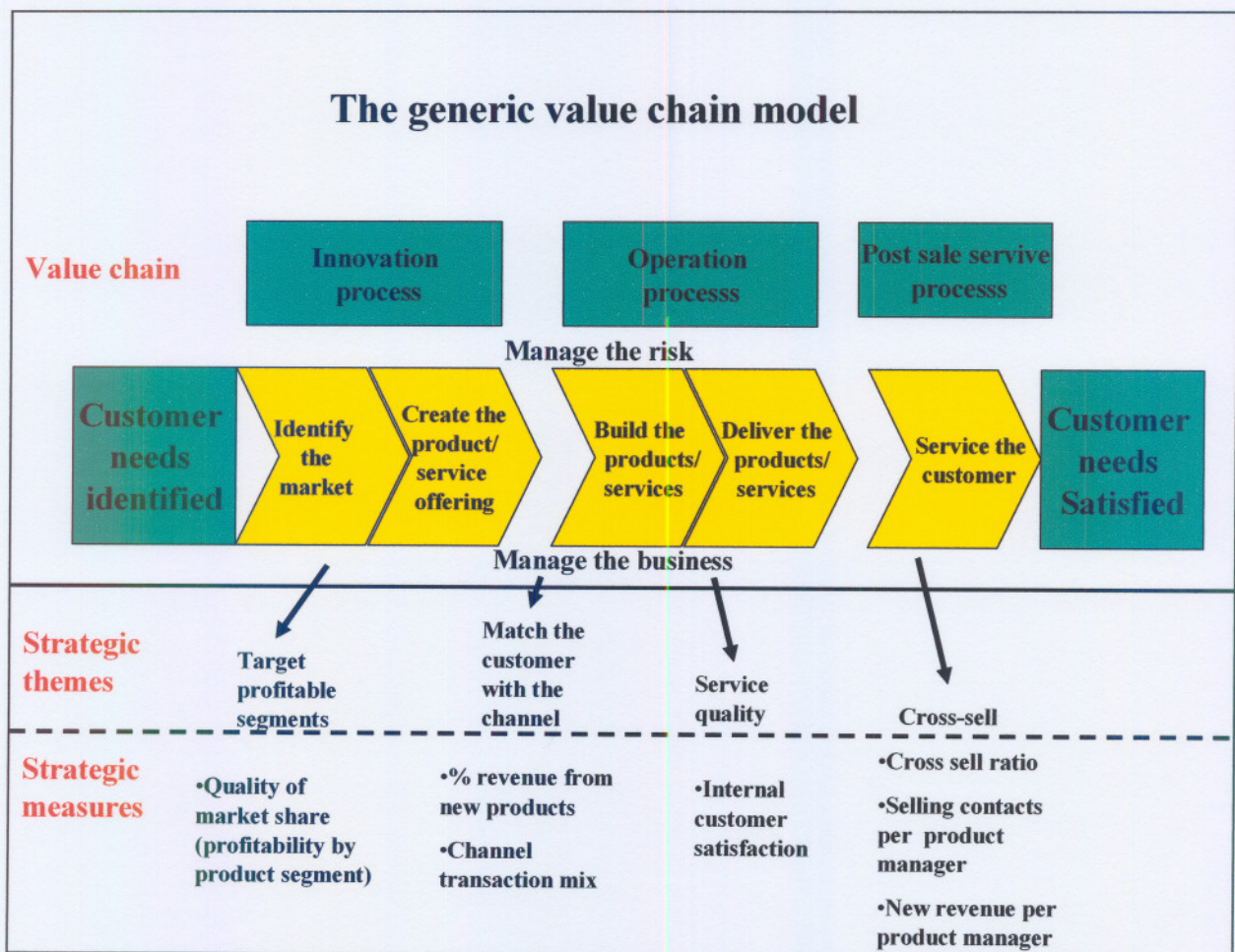
The operations process, the second major step in the generic internal value chain, is where existing products and services are produced and delivered to customers.

The third major step in the value chain is the service to the customer after the original sale or delivery of the product or service.

Figure 2.6 illustrates the generic value chain model as perceived by Kaplan and Norton (1996:96). At the top of the figure are the three processes discussed above, these in turn are broken down into their components represented by the block arrows which flow

from the customer needs being identified to being satisfied. Below this the strategic themes and measures per process are identified to complete the figure. This means that in the innovation process, firstly the market needs to be identified and secondly, an offering is designed for that market, where the strategic theme is market segmentation and the relative measure is percentage market share. For the operations process the offering is built and delivered to the customer. The strategic themes are customer/channel matching and service quality. The strategic measures for the operational processes are the percentage of revenue generated from new products and internal customer satisfaction. Finally in the post sales service process the focus is on servicing the customer and the strategic theme is cross selling with the measure is the percentage of cross sales and performance per product manager.

Figure 2.6 The generic value chain model



Source: Kaplan and Norton, (1996:96).

Table 2.5 represents the internal processes perspective in the Trainer Development scorecard. Note how the ideals of Kaplan and Norton's (1996:96) generic value chain filter through onto the scorecard at point 2 on the Table 2.5.

Table 2.5 Trainer Development SBU internal processes perspective

Internal Processes Perspective		
Key objectives	Performance driver measures	Measures
1. Increase product quality	For a course to be accredited by all major local institutes and by 10 major international institutes by 2006	<ol style="list-style-type: none"> 1. Facilitation assessment 2. Course development 3. Number of customer complaints 4. Return business
2. Improve systems management	Value added chain assessment	<ol style="list-style-type: none"> 1. Innovation process-marketing assessment, R and D assessment i.e. % revenue from new products 2. Operational process-Product delivery assessment i.e. internal customer satisfaction 3. Post sales service process-Customer service assessment, cross selling assessment
3. Achieve facilitation excellence	Facilitator rating scale (all facilitators should achieve 80%)	<ol style="list-style-type: none"> 1. Facilitator qualification 2. Facilitator experience 3. Facilitator registration with ETDP SETA 4. Facilitator equipment/venue assessment 5. Administration assessment
4. Achieve administrative excellence	Number of course disruptions due to administrative errors (reduce through a half life of 6 months)	<ol style="list-style-type: none"> 1. Number of customer complaints 2. Number of cancelled courses 3. Number of incorrect bookings 4. Number of times course material is incorrect or not provided

Source: Blackbeard *et al.* (2004:6).

2.3.4.3.2 Summary

In the internal processes perspective, managers identify the critical processes at which they must excel if they are going to meet the objectives of shareholders and of targeted customer segments. Conventional performance measurement systems focus only on monitoring and improving cost, quality and time based measures of existing business processes. In contrast, the approach of the Balanced Scorecard enables the demand for internal process performance to be derived from expectations of specific external constituencies i.e. customer and shareholders.

One recent development has been to incorporate the innovation process as a vital component of the internal business process perspective. The innovation process

highlights the importance of, first identifying the characteristics of the market segment that the organisation wishes to satisfy with its future products and services. Then design and develop the products and services that will satisfy those targeted segments. This approach enables the organisation to put considerable weight on research, design, and development processes that yield new products, services, and markets.

The operational process thus remains important and organisations should identify the cost, quality, time, and performance characteristics that will enable it to deliver superior products and services to its targeted current customers. Post sale service processes enable companies to feature when the appropriate important aspects of service that occur after the purchased product or service have been delivered to the customer. For the business the most important thereof is referrals and the cross selling of products (Kaplan and Norton, 1996:115-116).

2.3.4.4 Learning and growth perspective

The learning and growth perspective focuses on keeping up with changing customer expectations and the need to invest in company growth through human resource development (Jalbert and Landry, 2003:32-41). According to Kaplan and Norton (1996:126), the learning and growth perspective is the forth and final perspective on the Balanced Scorecard and develops objectives and measures to drive organisational learning and growth. The objectives established in the financial, customer and internal business process perspectives identify where the organisation must excel to achieve breakthrough performance. Where as the objectives in the learning and growth perspective provide the infrastructure to enable ambitious objectives in the other three objectives to be achieved. Objectives in the learning and growth perspective are the drivers for achieving excellent outcomes in the other three perspectives.

The Balanced Scorecard stresses the importance of investing for the future and not just in the traditional areas of investment, such as new equipment and new product development and research. Equipment, research and development investments are important but they are unlikely to be sufficient by themselves. Organisations must also invest in their infrastructure, people, systems, and procedures; if they are to achieve ambitious long-term financial growth objectives. (Kaplan and Norton, 1996:126.)

2.3.4.4.1 Employee development

According to Kaplan and Norton (1996:127-128), today almost all routine work has been automated; computer controlled manufacturing operations have replaced workers for routine machining, processing and assembly operations. Service companies are increasingly, giving their customers direct access to transactions processing through advanced information systems and communications. In addition, doing the same job over and over, at the same level of efficiency and productivity is no longer sufficient for organisational success. For an organisation just to maintain its existing relative performance, it must continually improve. If it wants to grow beyond today's financial and customer performance, adhering to standard operating procedures established by the organisational executives is not enough. Ideas for improving processes and performance for customers must increasingly come from front line employees who are closest to internal processes and the organisations customers. Standards for how internal processes and customer responses were performed in the past provides the base line from which improvements must continually be made. However, it cannot be a standard for current and future performance. This shift requires major re-skilling of employees so that their minds and creative abilities can be mobilised for achieving organisational objectives. Kaplan and Norton (2004:52-63) reintegrate this by emphasising that the most valuable intangible category is human capital.

2.3.4.4.2 Core employee measurement group:

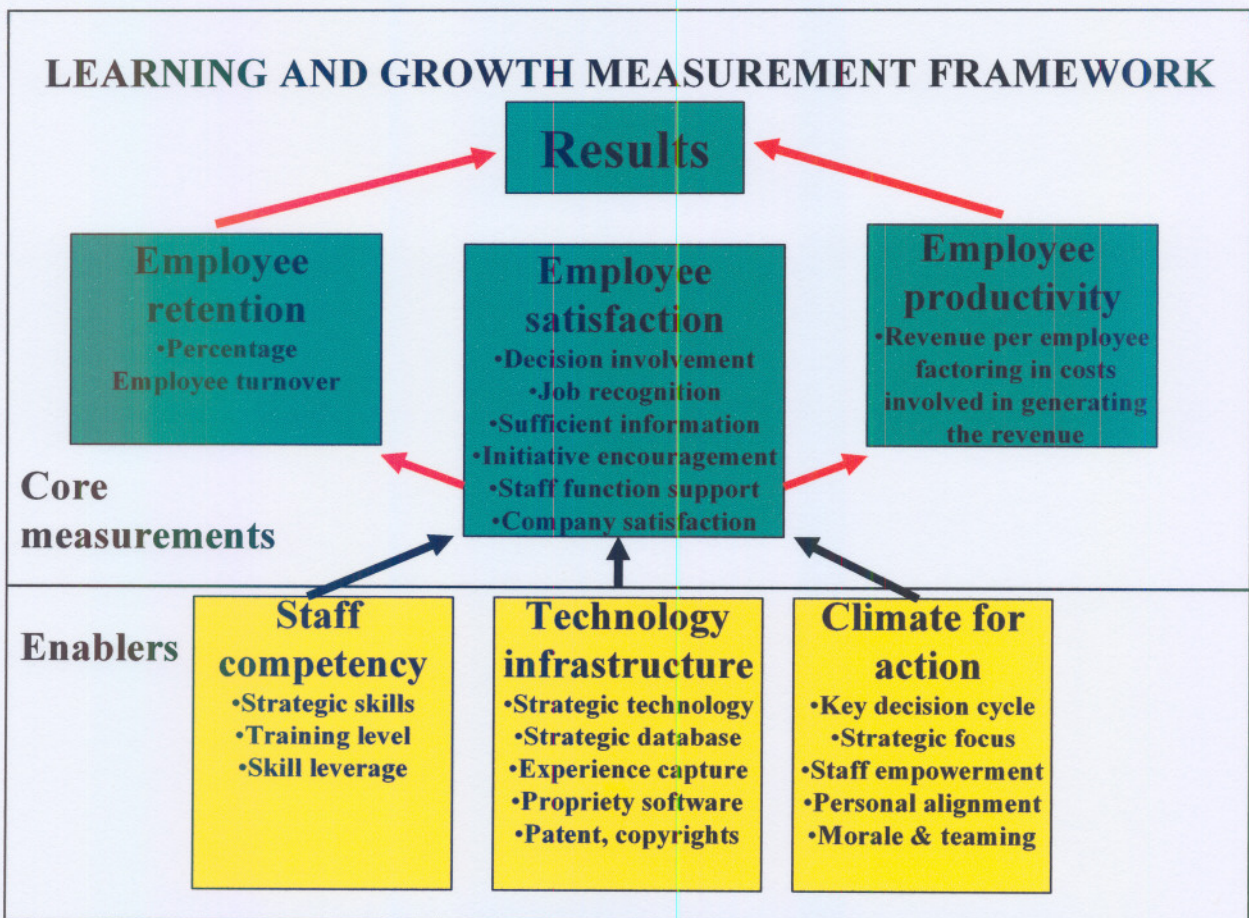
Kaplan and Norton (1996:129) have found that most companies use employee objectives drawn from a common core of three outcome measurements, namely:

1. Employee retention - This is the percentage of employee turnover.
2. Employee satisfaction - This can be determined by the amount of decision involvement, job recognition, sufficient information, initiative encouragement, staff function support and company satisfaction employees get.
3. Employee productivity - Revenue per employee factoring in costs involved in generating the revenue.

These core outcome measurements are then supplemented with situational specific drivers of the outcomes or enablers, namely:

1. Staff competency - These are the strategic skills, training level and skill leverage of the staff.
2. Technology infrastructure - The strategic technology, strategic database, experience capture, propriety software, patent and copyrights of the organisation.
3. Climate for action - The key decision cycle, strategic focus, staff empowerment, personal alignment, morale and teaming of the organisation.

Figure 2.7 Learning and growth measurement framework



Source: Kaplan and Norton, (1996:129).

Figure 2.7 represents the core employee measurement group and their enablers. From this figure it is possible to view how the enablers; competency, technological

infrastructure and correct climate influence employee satisfaction. This in turn promotes employee retention and productivity which are the non-financial measures, leading finally to improved results, which forms the driving financial measure.

The Trainer Development SBU learning and growth perspective is featured in Table 2.6. It is of interest to note that the Trainer Development core measures differ from Kaplan and Norton's (1996:129), in that employee retention is included in employee satisfaction and a new core measure is introduced as employee development, whereby each employee has a personal development plan. This was deemed necessary as, according to the SBU manager, "Higher education providers should be at the forefront of training technology development in order to further add value and credibility to course products." The enablers however do remain the same, namely: staff competency, technological infrastructure and climate for action. (Blackbeard, 2004.)

Table 2.6 Trainer Development SBU learning and growth perspective

Learning and Growth Perspective		
Key objectives	Performance driver measures	Measures
1. Employee development	Employee skills audit (NQF level compared to position and at least 100hrs training per year)	1. Development plan progress report 2. Hours training per employee 3. Employee NQF level
2. Employee satisfaction	Culture audit (% employee turnover)	1. Employee turnover 2. Employee motivation assessment 3. Suggestion Scheme i.e. numbers
3. Employee productivity	Employee ROI (where possible be 1.33 in 1)	1. Achievement of employee targets 2. % performance bonuses paid 3. Revenue earned per employee/ Revenue generated

Source: Blackbeard *et al.* (2004:7).

2.3.4.4.3 Summary

Ultimately the ability to meet ambitious targets for financial, customer, and internal business process objectives depend on the organisational capabilities for innovation learning and growth. The enablers for learning and growth come primarily from three sources: employees, systems and organisational alignment. Strategies for superior performance will generally require significant investment in people, systems and processes that build organisational capabilities. Consequently, objectives and

measures for these enablers of superior performance in the future should be an integral part of any organisation's Balanced Scorecard. (Kaplan and Norton, 1996:24-25.)

A core group of three employee based measures namely: satisfaction, productivity and retention, provide outcome measures for investments in employees, systems, and organisational alignment. The drivers of these outcomes, according to Kaplan and Norton (1996:24-29), are to date, somewhat generic and less developed than those of the other three Balanced Scorecard perspectives. This indicates that a SBU using the Balanced Scorecard should pay particular attention to the development of customized employee, system, and organisational metrics that can be more closely linked to a business unit's strategy.

2.3.4.5 Product innovation perspective

It is noteworthy that no real product innovation objectives or measures appear on any of the above Trainer Development SBU perspectives in particular the internal Processes perspective where product development would usually reside. This is attributed to the fact that the Trainer Development SBU places product innovation in its own perspective, as a fifth perspective. This has been done as the SBU manager considered course development and training, through innovative techniques based on the latest scientific research, to be essential in developing market leadership: the aim of the Maccauvlei vision (Blackbeard, 2004).

According to Kaplan and Norton (1996:34), the four generic perspectives should be considered a template, not a straight jacket. They include that there is no mathematical formula that exists to suggest that four perspectives are necessary or sufficient. But do agree that they have yet to come across a scorecard that uses less than four perspectives. In the adding of more perspectives, Kaplan and Norton (1996:35) recommend that that all stakeholder perspectives, when vital for the success of the business unit's strategy, can be incorporated in a Balanced Scorecard. The Trainer Development SBU product innovation perspective is featured Table 2.7.

Table 2.7 Trainer Development SBU product innovation perspective

Product Innovation Perspective		
Key objectives	Performance driver measures	Measures
1. Product development	Value of product rights (increase 25% by end of 2006)	<ol style="list-style-type: none"> 1. % of products less than 3yrs old - 25% 2. Ratio / time taken to incorporate new technology 3. Period between course updating 4. Number of new courses
2. Course accreditation	For a course to be recognised by all major local institutes and by 10 major international institutes by 2006	<ol style="list-style-type: none"> 1. Number of local institutes that endorse products 2. Number of international institutes that endorse products 3. Number of accredited facilitators 4. Number of SAQA registered courses
3. Product architecture	Product set value (increase 25% by end of 2006)	<ol style="list-style-type: none"> 5. Number of complementing products 6. Repeat business due to sequential or related products

Source: Blackbeard *et al.* (2004:8).

The Key objectives of the product innovation perspective is firstly product development, where course age and new technology incorporation is measured, with the aim of increasing final product value. The second key objective is course accreditation this has been included according to the SBU manager, "That no matter how good and innovative your product is, if it is not acceptable to the state education framework (SAQA) and other higher learning institutes, your course will have no market." The third key objective is product architecture; the premise behind this key objective is that of developing a set of innovative, accredited, high quality products that are sequential in nature according to the NQF structure set out by SAQA. With the aim of promoting repeat business and cross selling, since repeat business costs less to initiate than new business. (Blackbeard, 2004.)

This additional perspective makes the Trainer Development scorecard unique and indicates the adaptation that is required to develop a Balanced Scorecard that fits ones business needs. In the adding of additional perspectives, Kaplan and Norton (1996:34-35) indicate that additional perspectives should be undertaken with care and must form part of a fully integrated measurement system that contains causal chain linkages between each perspective that define the business unit's strategy in achieving its vision. Kaplan and Norton (1996:35) also warn against the use of too many measures since this can dilute and undercut the scorecard's focus on achieving the vision.

2.4 DEVELOPING METRICS

As mentioned, one of the key attributes of the Balanced Scorecard is its focus on lead indicators: measures that are non-financial in nature and indicate positive changes that can be made to influence future financial outcomes or lagging indicators. Schneiderman (1999:6) subscribes that a successful scorecard should have a ratio of at least six lead indicators to each lag indicator. The problem however is that lead indicators are difficult to develop, since they require innovation and often have no standard unit. This is often the reason companies depend so greatly on financial or lagging indicators as they are traditionally well documented and developed i.e. financial accounting, and have a standard unit i.e. Rands.

Gering and Mntambo (2001:20-21) identify three reasons why indicators based on traditional accounting systems provide notoriously poor measurement information. Firstly, financial information is easy to manipulate. Profit and loss depend on assumptions regarding the future and timing. Profits may be placed in reserves and released later to smooth performance. This may hide poor performance and when it is finally diagnosed it may already be too late to remedy the situation. Secondly, financial information is not timeous in nature. Changes in market conditions take time to show up in the financial results. This is exacerbated by the fact that in most companies the financial results themselves go through a verification process and often do not show what to correct once something has gone wrong. Finally, current profits cannot tell you whether you are investing enough or too much in the future or whether you are investing in the capacity you will need. (Gering and Mntambo, 2001:20-21.)

One relatively simple approach, according to Kaplan (1990:9), that can be used to develop non-financial measures is the half-life metric, developed by Schneiderman previously vice president of quality improvement and productivity at Analog Devices. The half-life metric, measures the length of time required for a processes performance to improve by 50%. It can be applied to any process metric such as cost, quality, or time, that the organisation wants to reduce to zero. Examples of such metrics are: late deliveries, number of defects, scrap, absenteeism, number of complaints and number of suggestion. This metric can even be applied to the wastage time in process cycle times and new product-development times. (Kaplan and Norton, 1990:9.)

The half-life metric assumes that when TQM teams are successfully applying formal quality improvement processes they should be able to reduce defects at a constant rate. For example, suppose the organisation has identified on time delivery as a critical customer objective. Currently, the business unit may be missing promised delivery dates on 30% of orders. If its goal is to reduce the missed delivery percentage to 1% over a four-year (48-month) period, a 30-fold improvement, it can reach and actually exceed this target by a continuous improvement process that reduces missed deliveries by 50% every nine months.

By establishing the rate at which defects are expected to be eliminated from the system, managers can validate whether they are on a trajectory that will yield the desired performance over the specified time period. A continuous improvement metric, like the half-life, tells us whether we are heading in the correct direction, and at a rate that will enable us to reach our ambitious target in the requisite time period. (Kaplan, 1990:9.)

To use the half-life metric as an outcome measure in process improvement, a company should (Kaplan and Norton, 1996:165):

- Identify the process metrics where it wants process improvements.
- Estimate the half-lives expected for these processes.
- Construct an index that will report the percentage of processes that are improving at the rate specified by the estimated half-lives.

The Half-life metric Figure 2.8 indicates an initiative by Trainer Development SBU over a 2 year period to reduce customer complaints; which at the beginning of the initiative averaged at 35 complaints per month. It was decided that the objective of reducing the number of complaints by half every four months was feasible. This metric is the top of a system of measures put into place within Trainer Development SBU administration and in conjunction with the Hotel and Conference centre SBU, as it was determined that this was the region where the majority of customer complaints originated from. (Blackbeard, 2004.)

In Figure 2.8 the red line indicates target number of customer complaints, it is notable that it is in the form of a curve showing that as one proceeds in achieving desired performance the increments get smaller and harder to achieve. The blue polygon represents the real number of customer complaints, thus the initiative's performance can be compared to the desired performance, shown by the red curve. Note that the real number of customer complaint levels out at 20 to 24 months, indicating that below five customer complaints per month is a realistic sustainable monthly target.

Figure 2.8 Half life metric customer complaints

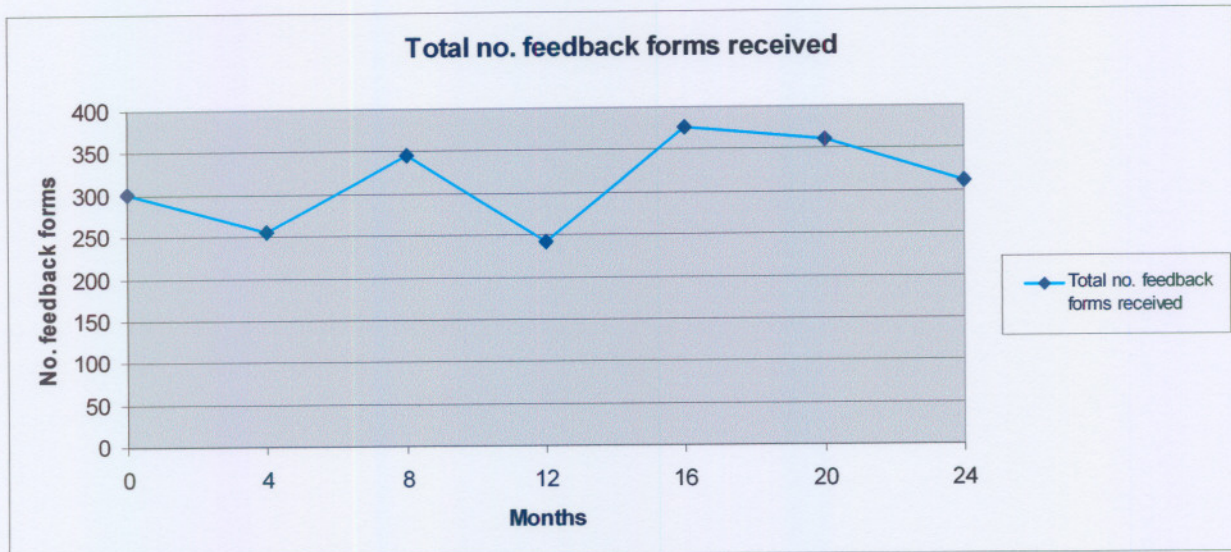


Source: Blackbeard *et al.* (2004:9).

There are two complementing measures that the Trainer Development SBU determined should accompany the half-life measure in customer complaints reduction initiative. These are the number of feedback forms received (Figure 2.9) and the number of delegates on course (Figure 2.10); when compared with the half-life measure of customer complaints they validate it by indicating if targets were achieved simply because less delegates or feedback forms were received in a certain month or whether these stayed constant and real improvement was achieved.

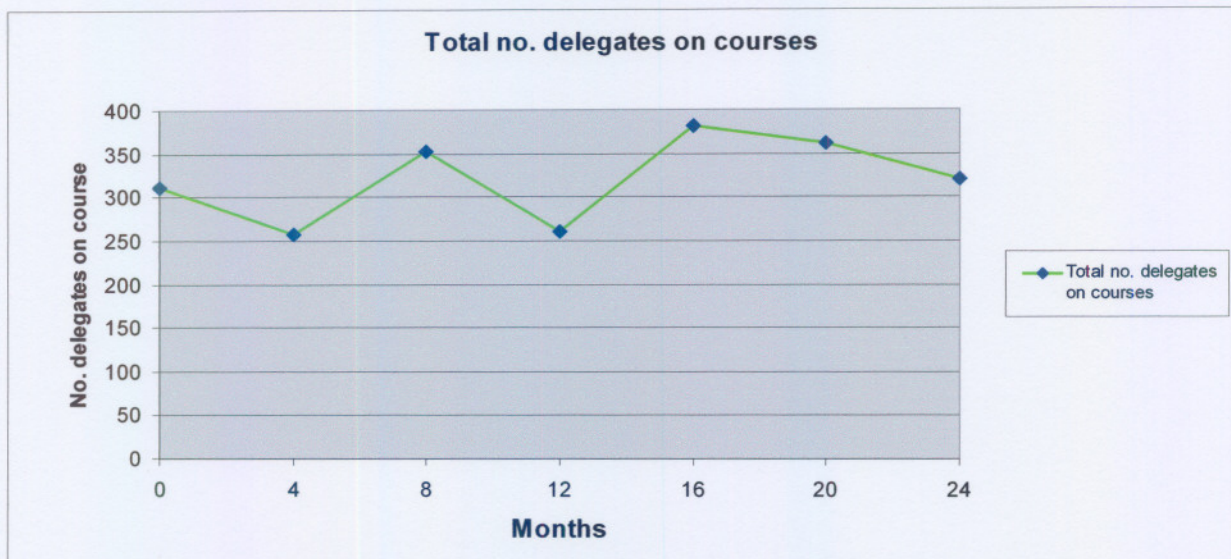
When the customer complaints half-life graph is examined in combination with the two complementing graphs (number of delegates and number of feedback forms received) this initiative can be considered to have been a success as customer complaints have been reduced from 35 to below 5 a month over a 24 month period.

Figure 2.9 Feedback forms received



Source: Blackbeard *et al.* (2004:9).

Figure 2.10 Total number of delegates on courses



Source: Blackbeard *et al.* (2004:10).

The half-life metric is just one of many systems for measurement of non-financial indicators. What makes the half-life method so useful is that it is highly adaptable and can be used on any process that can be zeroed. Secondly, it is easily understood and simple to use and finally, it has been tried and tested in many diverse applications over a number of years. (Schneiderman, 1999:8-9.)

2.5 SYNOPSIS

In this chapter, firstly the definition and benefits of the Balanced Scorecard were discussed and it was concluded that the Balanced Scorecard is a multi perspective strategic management tool that uses four perspectives. Where one perspective focuses on financial measures and the other three perspectives focus more on non-financial or leading indicators in order to determine how to achieve future financial goals. The most important benefit gained from the Balanced Scorecard is a focussed future orientated strategy that directs the company's resources in the same direction (alignment) to achieve its vision. Thus sustainable company growth can become a reality.

Secondly, the components of the Balanced Scorecard were discussed, namely: the company vision, mission, values and strategic perspectives.

The company vision describes where the company is going (destination), in other words what the company finally wants to achieve or be. The company mission statement describes how the company is going to achieve its vision, it can be said that the vision and mission are the scorecard drivers. Company values on the other hand, lay the foundations for the organisation and Balanced Scorecard culture; it is the spirit in which the company achieves its vision.

The vision, mission and values are used to help form the four Balanced Scorecard perspectives. The first perspective is the financial perspective which focuses on how the company looks to its shareholders. This is the perspective that all the other perspectives are answerable to, since a companies point of being is to grow revenue. Thus the financial parameters for the other perspectives are set here. The second perspective is the customer perspective, here the focus is placed on how to become the customers most valued supplier. This includes the product package offered, marketing and after sales service. The third perspective is the internal processes perspective, the focus here is on the processes both long and short term that the company needs to excel at to achieve financial and customer objectives. This perspective includes the processes involved in the entire organisational value chain. The final perspective is the learning and growth perspective, here the question asked is how can the company continue to improve and create value, particularly in regard to

employee capabilities and motivation. As a point of interest a product innovation perspective is discussed since the Trainer Development SBU makes use of one as a fifth perspective, since it considers product quality and accreditation to be paramount in achieving its vision. (Kaplan and Norton, 1995:1-8.)

The final part of this chapter covered the need for non-financial measures and how the half-life metric is a useful tool when non-financial measures are difficult to develop. The half-life metric relies on a premise of how long it will take to reduce a process defect by half, based on this a program of incremental goals can be created to reduce the defect to zero or as close as viably possible (Schneiderman, 1999:8-9).

The next chapter will continue on the Balanced Scorecard literature review theme, focusing on how the Balanced Scorecard is built and how to avoid Balanced Scorecard failure.

CHAPTER 3

BUILDING THE BALANCED SCORECARD

3.1 INTRODUCTION

This chapter contains the step by step process, according to Kaplan and Norton (1996:294-311), needed to build an organisation or strategic business unit's (SBU) first Balanced Scorecard. Each step of this process will be accompanied by a description of how the Trainer Development SBU built its scorecard.

The second half of this chapter is devoted to the reasons why a Balanced Scorecard implementation may prove unsuccessful. Again the Trainer Development SBU is used to demonstrate how these pitfalls can be avoided and sustained long term growth achieved.

3.2 BUILDING THE SBU'S FIRST BALANCED SCORECARD

3.2.1 Introduction: Building and implementing the Balanced Scorecard

Constructing a strategic business unit's first Balanced Scorecard can be accomplished by a systematic process that builds consensus and clarity about how to translate a SBU's mission and strategy into operational objectives and measures. The project requires an architect who can frame and facilitate the process and collect relevant background information for constructing the scorecard. The scorecard should however still represent the collective knowledge and energies of the senior executive team of the business unit. Unless this team is fully engaged in the process, a successful outcome is unlikely. Thus without the active sponsorship and participation of the senior executives, a scorecard project should not be initiated. (Kaplan and Norton, 1996:294.)

The aim of the scorecard building and implementation process is to cascade strategy down to operational level where real value is added. This process is also known as

strategic alignment. Fonvielle and Carr (2001:6) said that in order to be effective, this process must start with top management and cascade downward, "Unifying direction for units, functions, teams, and ultimately individuals."

3.2.2 Gaining top management support for the Balanced Scorecard program

The first priority in building a successful Balanced Scorecard is to gain consensus and support among senior management on why the scorecard is being developed (Kaplan and Norton, 1996:295). Many managers find the conceptual appeal of a Balanced Scorecard to be obvious; they see the shortcomings of measurement limited to financial measurement and need little prompting to develop a more balanced approach. The conceptual appeal of the scorecard, however, is not a sufficient reason to embark on such a program. In dealing with the task of gaining top management support, there are a few tactics that are useful. An important tactic is educating the key decision makers about the need and implementation of performance measures. Secondly, a high-level person to serve as a champion for the idea needs to be recruited (Fonvielle and Carr, 2001:4-14).

When the process is launched and properly supported, the senior executive team should identify and agree on the principal purposes for the project. These program objectives will help to (Kaplan and Norton, 1996:295):

- Guide the construction of objectives and measures for the scorecard.
- Gain commitment among the project participants.
- Clarify the framework for implementation and management processes that must follow the construction of the initial scorecard.

Within the Trainer Development SBU this process of gaining top management support was made easier since the SBU manager initiated the Balanced Scorecard project, after attending a series of seminars on new performance management techniques. The next step was to gain the consensus and support from the four product managers. This again was accomplished relatively easily owing to the culture of learning and associated change within the SBU as stated by the SBU manager (Blackbeard, 2004).

3.2.3 Decentralisation and leadership development

The Balanced Scorecard approach is best suited to a decentralised organisational structure as it functions optimally when the organisation is made up of strategic business units that work according to a cascaded corporate strategic plan (Fonvielle and Carr, 2001:6). According to Kaplan and Norton (1996:297-298), each SBU head uses the corporate scorecard as the starting point to formulate the unique SBU-level strategy based on the corporate Balanced Scorecard.

There however was no corporate or Maccauvlei scorecard for the Trainer Development SBU to follow in the forming of their scorecard. Instead the Maccauvlei vision, mission, values and strategy were used with the corporate objectives set by Anglo American Corporation head office to form the Trainer Development SBU scorecard from scratch. Thus the Trainer Development SBU scorecard is viewed as a pilot study for the roll out of a Maccauvlei scorecard (Blackbeard, 2004).

3.2.4 Reasons for choosing to construct a Balanced Scorecard

The initial impetus for constructing a Balanced Scorecard can arise from the need to (Kaplan and Norton, 1996:299):

- Clarify and gain consensus about vision and strategy
- Build a management team
- Communicate the strategy
- Link rewards to achieving strategic objectives
- Set strategic targets
- Align resources and strategic initiatives
- Sustain investment in intellectual and intangible assets
- Provide a foundation for strategic learning

According to Kaplan and Norton (1996:299), the selection of the objectives for the scorecard project at the outset, is not to constrain the subsequent uses of the

scorecard, but rather to motivate and communicate why the organisation is developing a Balanced Scorecard.

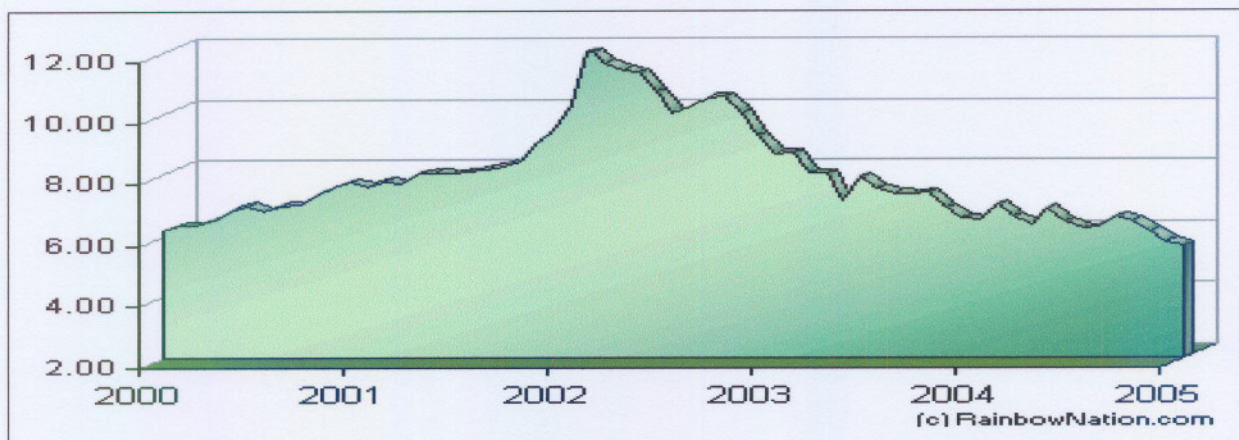
The central objectives that led to the Trainer Development SBU constructing a Balanced Scorecard was the need to develop sustainable growth and profitability.

Since the South African government implemented a policy that forced a spending 1,5% to 2% of employee remuneration on training, there has been a substantial increase in the funds available and thus demand for training. According to the South African Reserve Bank, the total remuneration to employees during 1997 was R312,4 billion, thus this means that an additional R3,1 billion will flow into the national education system. Given international experience, it is unlikely that these funds will flow to the public system. More likely it will flow to the private sector, the most likely segment to be favourably influenced by the government levies to be imposed on employers. The private sector is expected to offer investors the best combination of growth and equity available. (Skills Development Bill, 1997:1-24)

This has led to the Trainer Development SBU experiencing substantial revenue growth over the past five years. However, the sustaining of that growth poses the biggest question of their Balanced Scorecard; as the training sector is beginning to reach equilibrium in supply and demand. This is due in part to the market being flooded by new private training providers. The other central issue is that of the Trainer Development SBU's reliance on the mining sector for a large percentage of business. The mining sector's dependence on the rand/dollar exchange rate and the need for cost cutting when conditions are unfavourable i.e. the Rand's value being high against the dollar. This tends to lead to training costs being cut first, which in turn leads to the Trainer Development SBU losing business (Blackbeard, 2004).

Figure 3.1 shows the Rand dollar exchange rate for the last 5 years (2000 to 2005), it is notable that the exchange rate curve peaked in the first quarter of 2002, at just under 12 Rand per 1 US Dollar. For the current first quarter of 2005 it is around 5.80 Rand per 1 US Dollar; this is almost a halving of the value of the US dollar in two and half years. With regard to mining companies that earn in Dollars and pay their costs in Rands, this theoretically means a halving in revenue (Ryan, 2005).

Figure 3.1 The Rand/Dollar exchange rate



Source: RainbowNation.com, (2005).

3.2.5 Choosing the architect

Once agreement on the objectives and future role for the Balanced Scorecard has been reached, the organisation should select the person who will serve as the architect, or project leader, for the scorecard. According to Kaplan and Norton (1996:299), the architect will own and maintain the framework, philosophy, and methodology for designing and developing the scorecard. A good architect requires a client, which is usually the senior management team. As in a building project, the client must be totally engaged in the development process, since the client will assume ultimate ownership of the scorecard and will lead the management processes associated with using it.

Kaplan and Norton (1996:299) go on to say that the architect guides the Balanced Scorecard building process by overseeing the scheduling of meetings and interviews. The architect ensures that adequate documentation, background readings, and market and competitive information are available to the project team, and in general keeps the process on track and on schedule. Over the course of facilitating the construction of the initial scorecard the architect, must manage the cognitive analytic process that translates soft general statements about strategy and intent into explicit measurable objectives (Kaplan and Norton, 1996:299). He also serves as a team leader responsible for the interpersonal process of team building and conflict resolution. Thus the architect must have line power and executive support to impose the changes that a Balanced Scorecard brings about (Fonvielle and Carr, 2001:4-14).

The architect, in Kaplan and Norton's (1996:299-300) experience, has most often been a senior staff manager in the organisation. They have seen people from a broad range of backgrounds managing and facilitating the development process of a Balanced Scorecard in their firms, for example:

- Vice presidents of strategic planning or business development
- Vice presidents of quality management
- Vice presidents of finance, or divisional controller etc.

Some organisations have used outside consultants to assist the internal architect for the scorecard development process (Kaplan and Norton, 1996:300).

The architect in the construction of the Trainer Development SBU scorecard was the SBU manager this was deemed the logical choice based on his knowledge acquired through attending high level performance management seminars and studying the works of Kaplan and Norton. Owing to the SBU being of a relatively small size, the SBU manager served as both the client and architect. This fast tracked the process as gaining top management support was not an issue and the SBU manager already had a good idea of the key objectives that would need to be translated into the scorecard framework. (Blackbeard, 2004.)

3.2.6 Building a Balanced Scorecard: The process

The Trainer Development SBU used the suggested structure and timeframe put forward by Kaplan and Norton (1996:295-310) in building their first Balanced Scorecard approximately five years ago. The reason for choosing to do it this way is indicated by Leahy (2000) in the question, "Unless you begin with the textbook approach and map out your strategy first, how do you know what your performance measurement system will consist of?"

The process for building a SBU's first Balanced Scorecard consists of ten tasks which are divided into four steps. According to Kaplan and Norton (1996:300), if executed properly, the four-step process will encourage commitment to the scorecard among senior and mid-level managers and produce a competent scorecard that will help

managers achieve their program objectives. The four steps suggested by Kaplan and Norton (1996:302) are as follows:

Step 1 - Define the measurement architecture

- Task 1. Select the appropriate organisational unit
- Task 2. Identify SBU/ Corporate linkages

Step 2 - Build consensus around strategic objectives

- Task 3. Conduct first round of interviews
- Task 4. Synthesis session
- Task 5. Executive workshop first round

Step 3 - Select and design measures

- Task 6. Subgroup meetings
- Task 7. Executive workshop: Second round

Step 4 - Build the implementation plan

- Task 8. Develop the implementation Plan
- Task 9. Executive workshop: Third round
- Task 10. Finalize the implementation plan

3.2.6.1 Step 1 - Define the measurement architecture

Task 1. Select the appropriate organisational unit

The architect must, in consultation with the senior executive team, define the business unit for which a top-level scorecard is appropriate. Most corporations are sufficiently diverse that constructing a corporate-level scorecard may be a difficult first task. The initial scorecard process works best in a strategic business unit, ideally one that conducts activities across an entire value chain: innovation, operations, marketing, selling, and service. Such an SBU would have its own products and customers, marketing and distribution channels, and production facilities. It should be one where it is relatively easy to construct summary financial performance measures, without the complications related to cost allocations and transfer prices of products and services

from or to other organisational units. (Kaplan and Norton, 1996:301.)

The Trainer Development SBU meets these requirements for a Balanced Scorecard as it has its own complete value chain i.e. designing, marketing and facilitating courses within the ETDP SETA, while being responsible for its own financial results.

Task 2. Identify SBU/corporate linkages

According to Kaplan and Norton (1996:302), once the SBU has been defined and selected, the architect should learn about the relationship of the SBU in question to other SBU's, divisions and corporate initiatives. The reality is that in the business environment you can not focus on one component without affecting the others (Leahy, 2000). These relationships are analysed and causal models are drawn up in order to avoid various business units undermining each other's efforts (Ittner and Larker, 2003:88-95).

The architect conducts interviews with key senior divisional and corporate executives to learn about the following aspects identified by Kaplan and Norton (1996:302):

1. Financial objectives for the SBU (growth, profitability, cash flow, harvest)
2. Overriding corporate themes (environment, safety, employee policies, community relations, quality, price competitiveness, innovation)
3. Linkages to other SBU's (common customers, core competencies, opportunities for integrated approaches to customers, internal supplier/customer relationships)

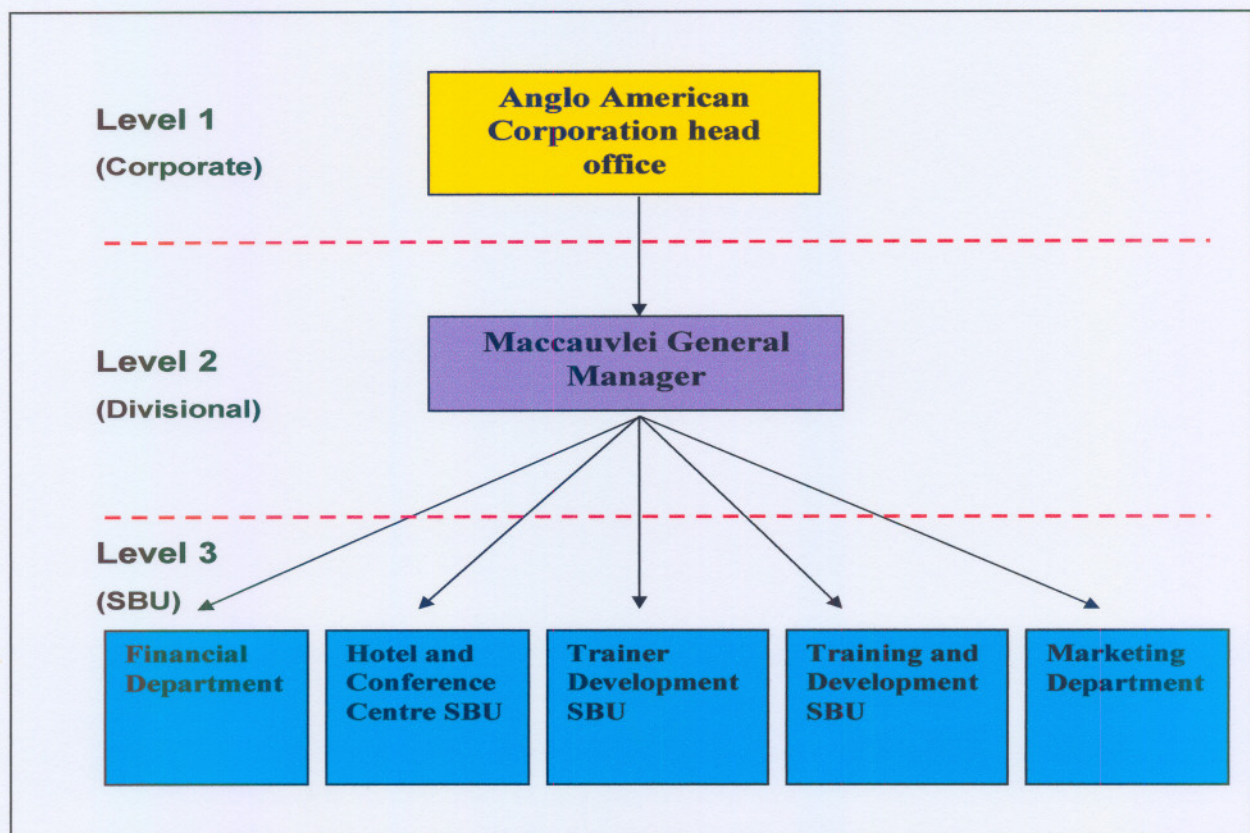
This knowledge is vital to guide the development process, so that the SBU does not develop objectives and measures that optimize the SBU at the expense of other SBU's or the entire corporation. The identification of SBU/corporate linkages makes visible both constraints and opportunities that might not be apparent if the SBU were considered as a completely independent organisational unit.

At Maccauvlei the Trainer Development SBU derives its Scorecard from the constraints set for Maccauvlei at divisional level; as at this stage there is no Maccauvlei or Anglo American corporate Scorecard. This can be attributed to the diverse set of sectors that

the Anglo American Corporation operates in, thus parameters and objectives are set for Maccauveli by Anglo American head office and these are incorporated in the Trainer Development SBU scorecard. In this instance the Trainer Development Scorecard could be considered a pilot study for further scorecard implementations. (Blackbeard, 2004.)

Figure 3.2 indicates the organisational flow chart and where the Trainer Development SBU fits in to the corporate structure. From Figure 3.2 it is noticeable that the Trainer Development SBU has the Training and Development SBU next to it. As afore mentioned, in Chapter 1, these two SBU's are in the same industry sector; so although they have different products there is the possibility of them undermining each other's efforts. To avoid this, the two SBU's are marketed together by the marketing department. This means that although both SBU's compile their own marketing plan, it has to be approved by the marketing department. This approach has thus far avoided any undermining issues. (Blackbeard, 2004.)

Figure 3.2 Organisational flow chart



Source: Blackbeard, (2004).

3.2.6.2 Step 2 - Build consensus around strategic objectives

Task 3. Conduct first round Interviews

At this stage of the scorecard construction the architect puts together an architectural team to interview the senior manager of each SBU, as well as the various executives of the company. The aim being to develop a general idea of the corporate strategy and the central objectives that need be achieved to make the strategy a success. This way the scorecard can reflect the strategy and direction that the company is going in and avoid conflicting paths. This interviewing process, developed by Kaplan and Norton (1996:302), is described in more detail below.

The architect should prepare background material on the Balanced Scorecard, as well as internal documents on the company's and SBU's vision, mission and strategy. This material is supplied to each senior manager in the business unit, typically between 6 and 12 executives. The architect should also acquire information on the industry and competitive environment of the SBU, including significant trends: in market size and growth; competitors and competitor offerings; customer preferences; and technological developments. After the senior executives have had an opportunity to review the material, the architect conducts interviews of approximately 90 minutes each with the senior managers. During these interviews, the architect obtains their input on the company's strategic objectives and tentative proposals for Balanced Scorecard measures across the four perspectives.

The interview process and subsequent synthesis of information is best done by a group of two or three individuals. The architect, as the leader of the team, will typically conduct the actual interview asking questions and probing after responses. One person may concentrate on the actual objectives and measures specified by the executive, while another attempts to capture quotes that serve to flesh out and give more meaning and context to the objectives and measures. The interviews can be free flowing and unstructured but the interview process, as well as the aggregation of information supplied by the executives, will be better facilitated if the architect uses a common set of questions and offers a common set of potential responses. (Kaplan and Norton, 1996:302.)

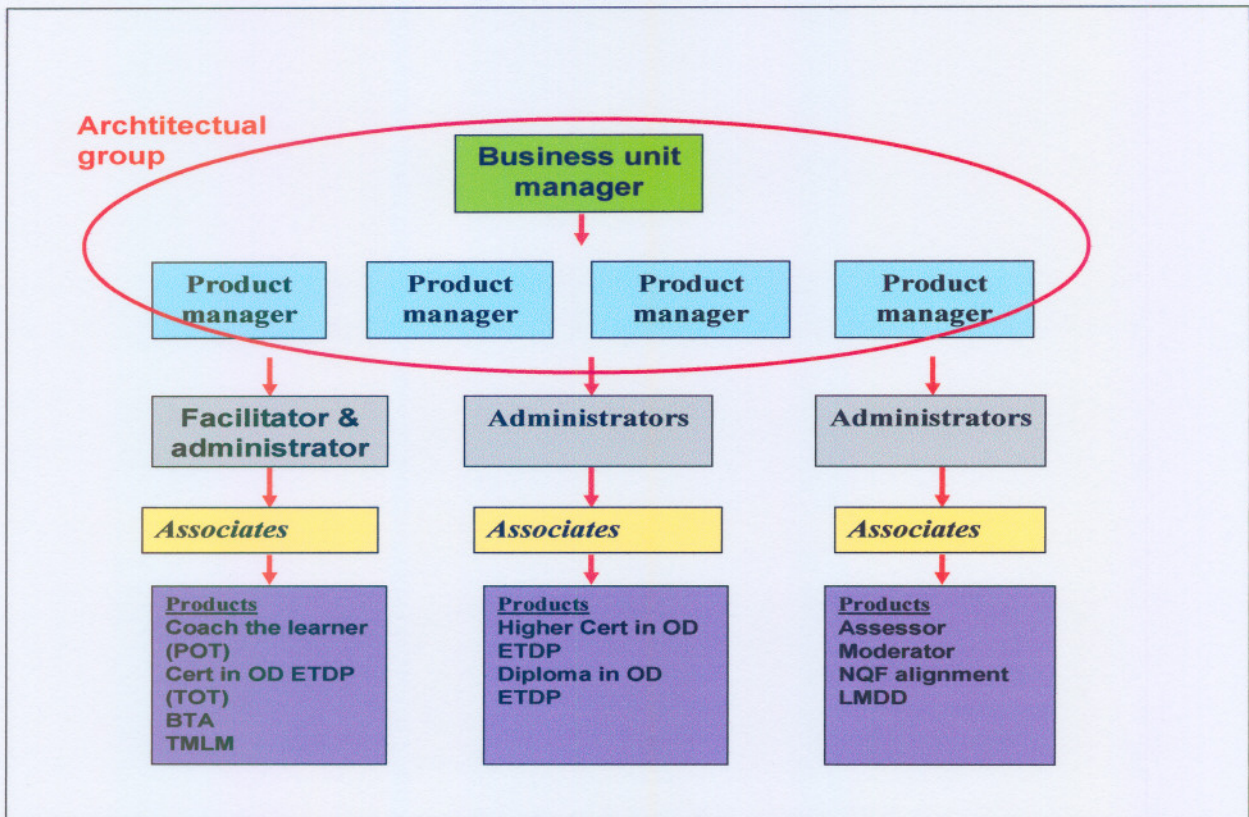
The interviews accomplish several important objectives, according to Kaplan and Norton (1996:302). The explicit objectives are to introduce the concept of the Balanced Scorecard to senior managers and respond to questions they have about the concept. As well as to get their initial input about the organisation's strategy and how this translates into objectives and measures for the scorecard. The implicit objectives include: beginning the process of having top management think about translating strategy and objectives into tangible operational measures. Learning about the concerns that key individuals may have about developing and implementing the scorecard; and identifying potential conflicts among the key participants either in their view of the strategy and objectives or at a personal or inter-functional level. (Kaplan and Norton, 1996:302-303.)

The Trainer Development SBU's architect, as before mentioned, is the SBU manager. The secondary SBU management level the product managers were consulted and formed the 'Architectural group.' This group conducted the interviews, the relevant parties and stakeholders were interviewed and all pertinent information was consolidated, so that the parameters and objectives of the Scorecard could be aligned with Maccauvlei as whole (Blackbeard, 2004). The most pertinent objectives identified for the Trainer Development SBU are as follows:

Firstly, a strategy needs to be developed that can be successfully used to achieve sustained long term growth for the Trainer Development SBU over a five year period. Secondly, the Trainer Development SBU should work closely with the ETDP SETA to ensure that it and its products are at the forefront of the higher education reformation process. Thirdly, relating to the achievement of the first objective, the Trainer Development SBU needs to differentiate itself from its competitors. This should be done through an aggressive product research and development strategy which focuses at incorporating the most up to date material according to international higher learning trends in to its course products. Fourthly, again relating to differentiation from competitors, the Trainer Development SBU needs to develop ties with and have its courses recognised by as many local and international higher learning institutes as possible (Blackbeard, 2004).

In order to indicate the structure and level of the 'Architectural team,' the SBU Trainer Development organogram is represented in Figure 3.3.

Figure 3.3 Trainer Development SBU organogram and products



Source: Blackbeard, (2004).

Task 4. Synthesis session

According to Kaplan and Norton (1996:304), after all the interviews have been conducted, the architect and other members of the architectural team should meet to discuss the responses in the interviews. Thus highlighting issues and developing a tentative list of objectives and measures that will provide the basis for the first meeting of the top management team. The architectural team members can also discuss their impressions about the personal and organisational resistance to the change the Balanced Scorecard will bring about. Arveson (1999) prescribes this as the major challenge to the scorecard and architectural team. The primary form of resistance to the Balanced Scorecard resides in the inclusion of non-financial measures as many managers exhibit bias towards these in favour of traditional financial measures (Lipe and Salterio, 2000:283-298). Thus the architectural team need to devise a strategy to smooth this change; this will normally revolve around

education programs, transparent communication and championing through top management support.

Kaplan and Norton (1996:304) further say that the output of the synthesis session should be a listing and ranking of objectives in the four perspectives. Each perspective and objective within the perspective should be accompanied by anonymous quotes from the executives that explain and support the objectives. The team should attempt to determine whether the tentative list of prioritized objectives represents the business unit's strategy, and whether the objectives across the four perspectives appear to be linked in cause-and-effect relationships that are consistent and mutually reinforcing (Kaplan and Norton 1997:5-10). These observations can serve as discussion questions during the executive workshop to follow.

Task 5. Executive workshop: First round

The architect schedules and conducts a meeting with the top management team to begin the process of gaining consensus on the scorecard. During the workshop, the architect facilitates a group debate on the mission and strategy statements until a consensus is reached. The group then proceeds from the mission and strategy statement to answer the question, "If I succeed with my vision and strategy, how will my performance differ for shareholders, for customers, for internal business processes, and for my ability to grow and improve?" Each perspective is addressed sequentially in this way. (Kaplan and Norton, 1996:304.)

The architect shows the proposed objectives, their rankings and associated quotes derived from the interviews. The group will then deliberate on the objectives for each perspective. Each objective should be discussed in its own right, not compared to other objectives, so that its specific relevance, strengths and weaknesses can be fully explored (Kaplan and Norton, 1996:305).

After all the candidate objectives for a perspective have been introduced and discussed, the group votes on the top three to four candidate objectives. This, according to Kaplan and Norton (1996:305), can be done in a variety of ways: written ballots, show of hands or giving each person three green dots and asking him or her to

place a dot next to each objective they considered the most important. For the highest-ranked objectives, the architect and the team will draft a one-sentence or one-paragraph description.

The executive team should then be divided into four subgroups, each responsible for one of the perspectives. One executive from each subgroup is chosen to lead the subgroup for the next stage of the process. In addition to the senior executives, representatives from the next levels of management and key functional managers should be included in the four to six person subgroups to broaden the base of deliberations and consensus. (Kaplan and Norton, 1996:305.)

By the end of the workshop, the executive team will have identified three to four strategic objectives for each perspective; a detailed descriptive statement for each objective; and a list of potential measures for each objective. After the meeting, the architect prepares and distributes a post-workshop document that summarizes the accomplishments, and lists the composition and leader of the four subgroups (Kaplan and Norton, 1996:304-305).

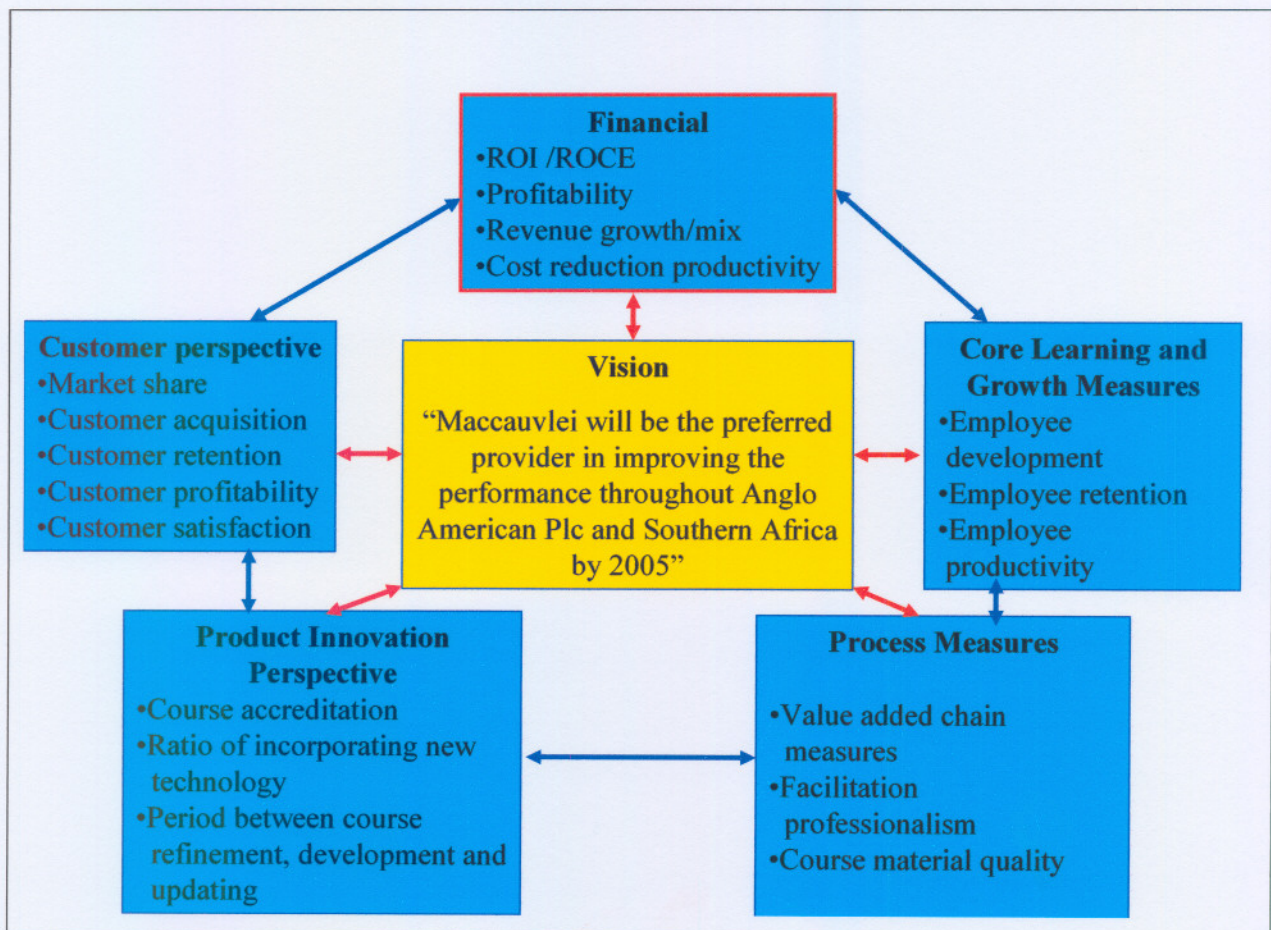
In the Trainer Development SBU's case its relatively small size meant that the SBU manager and four product managers worked together in designing the objectives and relating measures for each perspective, thus the above mentioned process was done within the architectural team itself. To suit the SBU business conditions five perspectives were decided on namely: the financial perspective, the customer perspective, the learning and growth perspective, the internal business perspective, and the product innovation perspective. (Blackbeard, 2004.)

The key objectives for financial perspective consisted of increasing revenue, increasing growth, cost reduction and increasing return on investment. From the customer perspective the key objectives were: improved customer satisfaction and loyalty, and increased market share. The internal process perspective key objectives were: improved product quality, improvement in systems management, better facilitation quality and administrative competence. The learning and growth perspective key objectives were: pertinent improved employee development, increased employee satisfaction and productivity. Finally, for the product innovation perspective they were:

market leading product development, course accreditation and improved product architecture focussing on cross-selling initiatives. (Blackbeard, 2004.)

Figure 3.4, adapted from Kaplan and Norton (1996:9), represents the five perspectives of the Trainer Development driven by its vision and strategy. The financial perspective has been placed higher than the other perspectives as, according to Kaplan and Norton, the financial perspective serves as the parameter for the objectives and measures in all other scorecard perspectives. In each perspective the key objective measures for that perspective are listed. The outer blue arrows indicate the links i.e. cause and effect relationships that each perspective has with each other. The inner red arrows indicate the alignment between the vision (strategy) and the five perspectives of the Trainer Development SBU.

Figure 3.4 Trainer Development SBU Balanced Scorecard structure



Source: Kaplan and Norton, (1996:9); Blackbeard, (2004).

3.2.6.3 Step 3 - Select and design measures

Task 6. Subgroup meetings

According to Kaplan and Norton (1996:305-306), the architect now works with the individual subgroups for several meetings. During these meetings, the subgroups attempt to accomplish four principal objectives in their assigned perspective:

1. Refine the wording of the strategic objectives in line with the intentions expressed in the first executive workshop.
2. For each objective, identify the measure or measures that best capture and communicate the intention of the objective.
3. For each proposed measure, identify the sources of the necessary information and the actions that may be required to make this information accessible.
4. For each perspective, identify the key linkages among the objectives within the perspective, as well as between this perspective and the other scorecard perspectives identifying how each measure influences the other.

Selecting and designing measures

Kaplan and Norton (1996:306) indicate that the essential objective in selecting specific measures for a scorecard, is to identify the measures that best communicates the meaning of a strategy to achieve an objective. As every strategy is unique, every scorecard should be unique and contain several unique measures. However, Kaplan and Norton (1996:306-307) have identified the following core outcome measures that are generic to most scorecards:

The core financial measures are: return-on-investment (ROI), economic value-added (EVA), profitability, revenue growth/mix and cost reduction productivity. Secondly, the core customer measures are: market share, customer acquisition, customer retention customer profitability and customer satisfaction. Finally, the core learning and growth measures are: employee satisfaction, employee retention and employee productivity. Interestingly, Kaplan and Norton (1996:306-307) do not include any generic core internal process measures; it is therefore assumed that internal processes are too

diverse for a single set of core measures to be applicable to all companies. Kaplan and Norton (1996:96) have however developed a set of possible strategic measures for the internal process perspective this is indicated in Paragraph 2.3.4.3.1.

While most scorecards will draw heavily from the core measures provided by Kaplan and Norton (1996:306-307), the art of defining measures for a scorecard rests with the performance drivers. These are the measures that make things happen, that enable the core outcome measures to be achieved. Thus the aim, in this task, is for the architect and the subgroup team to devise performance driver measures in the four perspectives that will communicate, implement, and monitor the business unit's unique strategy.

The final output from the subgroups for each perspective, according to Kaplan and Norton (1996:307), should be:

- A list of the objectives for the perspective, accompanied by a detailed description of each objective.
- A description of the measures for each objective.
- An illustration of how each measure can be quantified and displayed.
- A graphic model of how the measures are linked within the perspective and to measures or objectives in other perspectives.

When these outputs have been accomplished, the architect schedules the second executive workshop.

At this point the Trainer Development SBU scorecard's construction differs from Kaplan and Norton's (1996:302) suggested plan, as its relatively small size meant that the architectural team was better suited to this task than subgroups. The key objectives and performance driver measures were hence formed by the architectural team for each perspective respectively. One of the added advantages of doing it this way, according to the SBU manager, was that each member of the team could see the whole business spectrum of the Trainer Development SBU and thus the causal links could be better identified between perspectives (Blackbeard, 2004). Table 3.1 represents the key objectives and performance drivers identified by the architectural team for each of the five Trainer Development SBU perspectives.

Table 3.1 Trainer Development SBU objectives and performance driver measures

Trainer Development SBU objectives and performance driver measures	
Key objectives	Performance driver measures
Financial perspective	
1. Increase revenue	Achieve/surpass budget of R8 805919
2. Increase growth	Growth in revenue R 7 00000 or 8.5%
3. Reduce costs	Achieve/ go below cost budget R3 600000
Customer perspective	
1. Customer satisfaction	Repeat sales (70% of sales)
2. Improve customer loyalty	Repeat sales (70% of sales)
3. Increase market share	% market share (40% in product segment)
Product innovation and development perspective	
1. Product development	Value of product rights (increase 25% by end of 2006)
2. Course accreditation	For course to be recognised by all major local institutes and by 10 major international institutes by 2006
3. Product architecture	Product set value (increase 25% by end of 2006)
3. Employee productivity	Employee ROI (where possible be 1.33 in 1)
Internal process perspective	
1. Increase product quality	For course to be accredited by all major local institutes and by 10 major international institutes by 2006
2. Improve systems management	Value added chain assessment
3. Achieve facilitation excellence	Facilitator rating scale (all facilitators should achieve 80%)
4. Achieve administrative excellence	Number of course disruptions due to administrative errors (reduce through a half life of 6 months)
Learning and growth perspective	
1. Employee development	Employee skills audit (NQF level compared to position and at least 100 hrs training per year)
2. Employee satisfaction	Culture audit (% employee turnover)

Source: Blackbeard *et al.* (2004:9).

Task 7. Executive workshop: Second round

The second workshop involves the senior management team, their direct subordinates, and a larger number of middle managers. The organisation's vision, mission, strategy and the newly created tentative objectives and measures for the scorecard should be debated. The output from the subgroups need to be presented by the executives in the subgroups, not by the architect. The presentations, according to Kaplan and Norton (1996:304), will help build ownership of the objectives and measures, as well as for the entire scorecard development process. The participants should in a plenary session or

working group, comment on the proposed measures and start developing an implementation plan. Kaplan and Norton (1996:305) indicate that a good focal point for this second workshop is to be able, at the end, to sketch out a brochure to communicate the scorecard intentions and contents to all employees of the business unit. A secondary objective would be to encourage participants to formulate stretch objectives for each of the proposed measures, including targeted rates of improvement. Depending on the type of measure under consideration and the organisation's philosophy about target setting, a variety of approaches can be employed e.g. benchmarking, rates of change and the half-life method, in order to specify targets to be achieved in the next three to five years (Kaplan and Norton, 1996:304–307.)

For the reasons mentioned in task 6, the architectural team of the Trainer Development SBU developed the secondary measures on their scorecard. These secondary measures were then taken and stretch objectives were associated with them. Table 3.2 to 3.6 indicate the top level of the Trainer Development SBU Balanced Scorecard, it is now possible to see how the key objectives are driven by the performance driver measure and operationalised by the secondary measures. (Blackbeard, 2004.)

Table 3.2 The financial perspective

Financial Perspective		
Key objectives	Performance driver measures	Secondary Measures
1. Increase revenue	Achieve/surpass budget of R8 805919	1. Revenue per product manager 2. Revenue per product 3. Number of courses facilitated
2. Increase growth	Growth in revenue R 7 00000 or 8.5%	1. Revenue growth per product manger 2. Revenue growth per product 3. % market share 4. % industry growth
3. Reduce costs	Achieve/ go below cost budget R3 600000	1. Cost per product manager 2. Cost per product 3. Total remuneration 4. Total facilities and equipment cost 5. Total administrative cost 6. Total marketing cost 7. Total R and D cost
4. Increase return on investment (ROI)	Achieve ROI ratio of 1.33 in 1	1. ROI per product manager 2. ROI per product 3. ROI from product development

Source: Blackbeard *et al.* (2004:4).

Table 3.3 The customer perspective

Customer Perspective		
Key objectives	Performance driver measures	Measures
1. Customer satisfaction	Repeat sales (70% of total accounts)	<ol style="list-style-type: none"> 1. Response time to customer requests 2. Number of complaints 3. Number of referrals 4. Customer retention
2. Improve customer loyalty (retention)	Repeat accounts (70% of accounts)	<ol style="list-style-type: none"> 1. Number of referral 2. % return business 3. Number of contacts made with existing customers
3. Increase market share	% market share (40% in product segment)	<ol style="list-style-type: none"> 1. Customer analyses 2. Competitor analysis 3. Customer service 4. % New customer acquisition 5. % Customer retention sales 6. % Related product sales
4. Customer acquisition	% new accounts (30% of total accounts)	<ol style="list-style-type: none"> 1. % new customers in each region 2. % new customer from each company 3. % new customer from each industry
5. Customer profitability	1.28 in 1 ROI	<ol style="list-style-type: none"> 1. Cost per customer 2. Net profit per customer

Source: Blackbeard *et al.* (2004:5).

Table 3.4 The internal processes perspective

Internal Processes Perspective		
Key objectives	Performance driver measures	Secondary Measures
1. Increase product quality	For course to be accredited by all major local institutes and by 10 major international institutes by 2006	<ol style="list-style-type: none"> 1. Facilitation assessment 2. Course development 3. Number of customer complaints 4. Return business
2. Improve systems management	Value added chain assessment	<ol style="list-style-type: none"> 1. R and D assessment 2. Marketing assessment 3. Product delivery assessment 4. Customer service assessment
3. Achieve facilitation excellence	Facilitator rating scale (all facilitators should achieve 80%)	<ol style="list-style-type: none"> 1. Facilitator qualification 2. Facilitator experience 3. Facilitator registration with ETDP SETA 4. Facilitator equipment/venue assessment 5. Administration assessment
4. Achieve administrative excellence	Number of course disruptions owing to administrative errors (reduce through a half life of 6 months)	<ol style="list-style-type: none"> 1. Number of customer complaints 2. Number of cancelled courses 3. Number of incorrect bookings 4. Number of times course material is incorrect or not provided

Source: Blackbeard *et al.* (2004:6).

Table 3.5 The learning and growth perspective

Learning and Growth Perspective		
Key objectives	Performance driver measures	Secondary Measures
1. Employee development	Employee skills audit (NQF level compared to position and at least 100hrs training per year)	1. Development plan progress report 2. Hours training per employee 3. Employee NQF level
2. Employee satisfaction	Culture audit (% employee turnover)	1. Employee turnover 2. Employee motivation assessment 3. Suggestion Scheme i.e. numbers
3. Employee productivity	Employee ROI (where possible be 1.33 in 1)	1. Achievement of employee targets 2. % performance bonuses paid 3. Revenue earned per employee/ Revenue generated

Source: Blackbeard *et al.* (2004:7).

It is notable in Table 3.6, the product innovation perspective, that the secondary measures would have normally formed part of the internal processes and, learning and growth perspective, had the Trainer Development SBU only used the four generic perspectives.

Table 3.6 The product innovation perspective

Product Innovation Perspective		
Key objectives	Performance driver measures	Secondary Measures
1. Product development	Value of product rights (increase 25% by end of 2006)	1. % of products less than 3yrs old -25% 2. Ratio / time taken to incorporate new technology 3. Period between course updating 4. Number of new courses
2. Course accreditation	For course to be recognised by all major local institutes and by 10 major international institutes by 2006	1. Number of local institutes that endorse products 2. Number of international institutes that endorse products 3. Number of accredited facilitators 4. Number of SAQA registered courses
3. Product architecture	Product set value (increase by 25% by end of 2006)	1. Number of complementing products 2. Repeat business due to sequential or related products

Source: Blackbeard *et al.* (2004:8).

3.2.6.4 Step 4 - Building the implementation plan

Task 8. Developing the implementation plan

Kaplan and Norton (1996:308) suggest that a newly formed team, often made up of the leaders of each subgroup, formalizes the stretch targets and develop an implementation plan for the scorecard. This plan should include how the measures are to be linked to the data base and information systems, as well as how to communicate the Balanced Scorecard throughout the SBU. Olve *et al.* (2004:7) in fact emphasize that a scorecard communication plan can either make or break a scorecard implementation. This plan should also encourage and facilitate the development of second-level metrics for the operational levels. As a result of this process, an entirely new executive information system that links top-level business unit metrics down through shop floor and site-specific operational measures can be developed (Kaplan and Norton, 1996:308).

The Trainer Development SBU implementation plan again was undertaken by the architectural team for the reason given in task 6. The implementation plan can be seen more as an educational program on the Balanced Scorecard where all employees were notified about the changes that the scorecard would bring about, to the SBU and to them as individuals. Once all understood the changes that would occur, it became the product managers' responsibility to link their own and subordinates' goals and measures to the scorecard using their existing information system. Although relatively simple at this stage, the information system had already been geared towards using the Balanced Scorecard through years of using Management by Objectives (MBO's). This process was overseen and facilitated the whole way by the SBU manager. (Blackbeard, 2004.)

Task 9. Executive workshop: Third round

For the third round of workshops, Kaplan and Norton (1996:308) say that, the senior executive team should meet in order to reach a final consensus on the vision, objectives, and measurements developed in the first two workshops, and to validate the stretch targets proposed by the implementation team. The executive workshop also identifies preliminary action programs to achieve the targets. This process usually ends

up by aligning the strategic business unit's various change initiatives to the scorecard objectives, measures, and targets. Fonvielle and Carr (2001:4-14) elaborate that the success of the Balanced Scorecard depends on the extent to which the entire business unit is aligned with the overall goals and objectives of the company. Thus, by the end of the workshop the executive team should agree on an implementation program to communicate the scorecard to employees, integrate the scorecard into a management philosophy, and develop an information system to support the scorecard (Kaplan and Norton, 1996:308).

Task 10. Finalize the implementation plan

For a Balanced Scorecard to create value, it needs to be integrated into the organisation's management system. Kaplan and Norton (1996:308) recommend that management begin using the Balanced Scorecard within 60 days. Thus a phase in plan should be developed, where the best available information is used to focus the management agenda in such a way that it is consistent with the priorities of the scorecard. The business unit's information system needs to be updated and adapted to the Balanced Scorecard in order to facilitate target-setting, monitoring and causal relationship links (Olve *et al.* 2004:7). In fact Martinsons, Davison and Tse (1999:71-78) believe that the Balanced Scorecard can actually be used to measure the value and effectiveness of this information system itself.

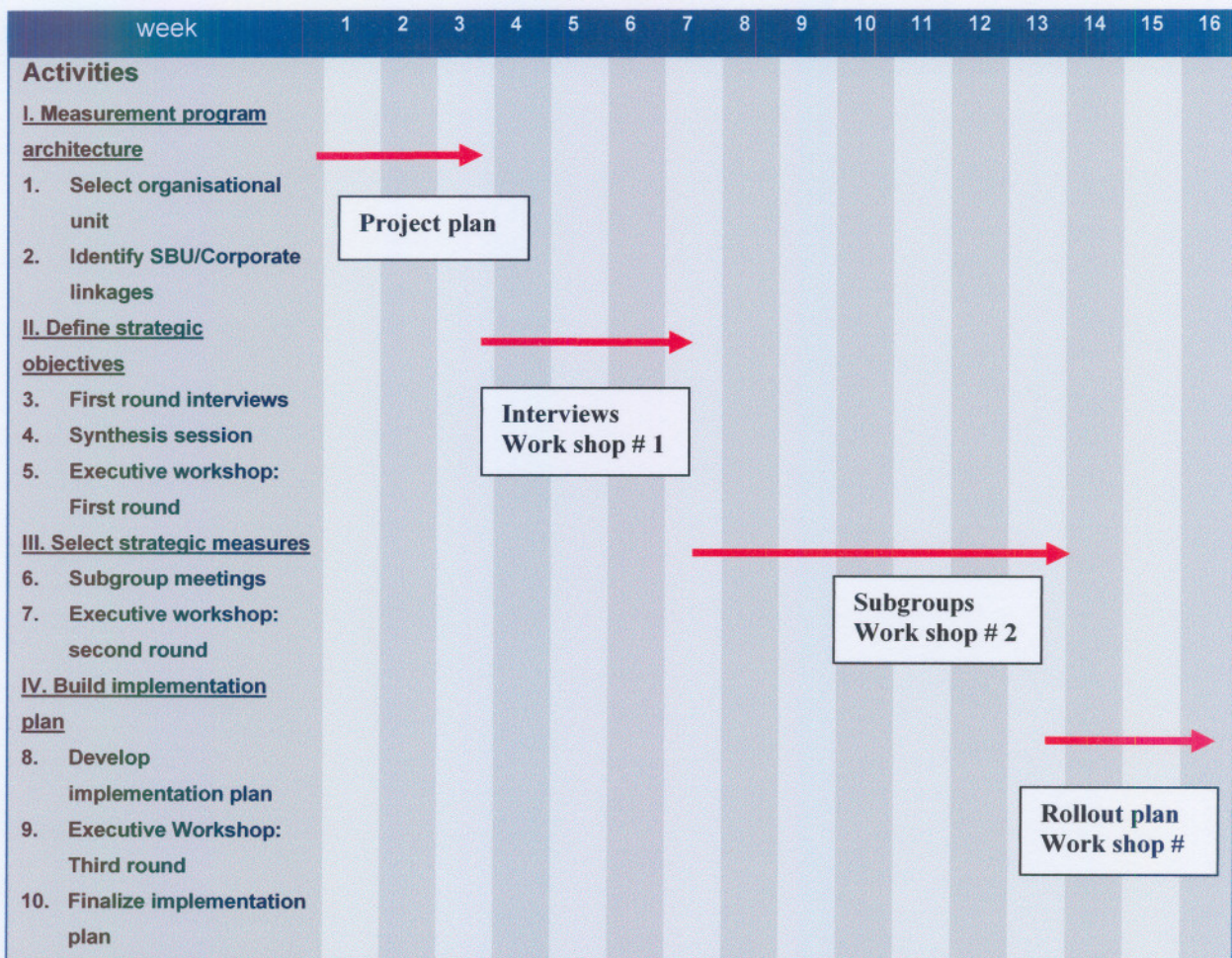
Time frame for implementation

According to Kaplan and Norton (1996:308), a typical scorecard rollout project should last for 16 weeks (see Figure 3.5). Many business units believe that they do not have enough time to implement the Balanced Scorecard in full. To remedy this they try to develop a makeshift performance measurement system that is more tactical than strategic in nature. The problem with this approach is that it can steer companies away from measuring the things that really matter (Leahy, 2000). Kaplan and Norton (1996:308-310) do however substantiate the scorecard building time span by indicating that not all of the time is taken up with scorecard activities, as the schedule is largely determined by senior executives' availability for interviews, workshops, and subgroup meetings. If people are available, on demand, the project time schedule can be compressed. An advantage of doing the project over a 16-week period is that the

senior executive team has time between scheduled events to contemplate and reflect on the evolving structure of the Balanced Scorecard and strategy; the information system and; most importantly the management processes that it will change (Kaplan and Norton, 1996:309).

The architect's involvement is substantial at the start of this timetable, up to about the end of week 6 when the first executive workshop is held. In the second half of the timetable, the client (senior executive team) should be taking more responsibility for the development of the scorecard. The architect then shifts to a staff and facilitating role, helping schedule the subgroup meetings and assisting in conducting of these meetings. The more that the senior executive teams are responsible for the subgroup meetings and the subsequent executive workshops, the more likely that the Balanced Scorecard project will culminate in successfully accepted Balanced Scorecard. (Kaplan and Norton, 1996:308-309.)

Figure 3.5 Generic Balanced Scorecard implementation timeline



Source: Kaplan and Norton, (1996:309).

The scorecard implementation timeline presented in Figure 3.5 is based on the assumption that the business unit has already formulated its strategy and has its market and customer research readily available. In order that this information can be used to make informed decisions on market segmentation and the value propositions to be delivered to customers in the targeted market segments. If the business unit must still do a strategic analysis of its industry so that it can make fundamental choices about market, product, and technology strategies; or if it must conduct more detailed market research, the schedule will be extended by the amount of time required for these tasks. (Kaplan and Norton, 1996:310.)

In the case of the Trainer Development SBU the building of the Balanced Scorecard was undertaken as an intensive four week project. This was possible through the fact that the courses facilitated by the Trainer Development SBU require a full week to run. (Hence when there is a public holiday in a week that week is usually reserved for administrative purposes.) Thus the Trainer Development SBU Balanced Scorecard was built when there were public holidays in two consecutive weeks, giving two full weeks of exclusive focus on building the scorecard. The other two weeks of normal operations were used to implement the scorecard into day to day operations. The advantages of this approach included: momentum was maintained in the project; the sub groups were always available; and no significant time loss occurred in normal business activities. (Blackbeard, 2004.)

At the completion of the project schedule, the senior and top middle managers of the business unit should have obtained clarity and consensus on the translation of the strategy into specific objectives and measures for the four perspectives. They should have agreed on a rollout plan to implement the scorecard and the developing of a new sufficiently adapted information system. There should be a broad understanding of the management processes that will be changed as a result of having scorecard measures at the heart of the organisation's management systems. (Kaplan and Norton, 1996:310.)

3.3 GUIDELINES FOR USING THE BALANCED SCORECARD

In understanding and realising the value of Balanced Scorecards, Venkatraman and

Gering (2004:1) claim that, "There have been as many unsuccessful Balanced Scorecard implementations as successful ones." Despite this Gering and Mntambo (2001:20) indicate, "It is estimated that 50% of fortune 1000 companies are using the Scorecard in one form or another." This suggests that the Balanced Scorecard has provided value for these companies, however this value is not assured and certain pitfalls need to be avoided when implementing a Balanced Scorecard. Schneiderman (1999:6) identified six possible reasons for a Balanced Scorecard implementations failing. In this section these six reasons will be discussed and how the Trainer Development SBU avoided them.

3.3.1 Schneiderman's six reasons for Balanced Scorecard failure

The focus in this section is on Schneiderman's (1999:6) six reasons for Balanced Scorecard failure and how to avoid them. This has been done as Schneiderman is credited with creating the first Balanced Scorecard prototype (Kaplan and Norton, 1996:vii) and has many years of experience with the Balanced Scorecard in a vast array of circumstances. Schneiderman's (1999:6) six reasons for Balanced Scorecard failure are as follows:

1. The independent (i.e. non-financial) variables on the scorecard are incorrectly identified as the primary drivers of future stakeholder satisfaction.
2. The metrics are poorly defined.
3. Improvement goals are negotiated rather than based on stakeholder requirements, fundamental process limits and improvement process capabilities.
4. There is no deployment system that breaks high level goals down to the sub process level where actual improvement activities reside.
5. A state of the art improvement system is not used.
6. There is not and can not be a quantitative linkage between non-financial and expected financial results.

These will now be discussed individually in more detail:

3.3.1.1 Incorrect primary measures/drivers of future stakeholder satisfaction

According to Schneiderman (1999:6), nearly every surviving organisation has made dramatic improvements to the obvious areas. Now, the vital few areas for improvement are much less visible. A common mistake is to simply add more non-financial measures, but this results in a loss of organisational focus and a dilution of effort (Ittner and Larker, 2003:88-95). According to Cummings (2004), too many metrics cause confusion about the Balanced Scorecard and hamper its ability as an indicator. Schneiderman (1999:6) suggests the following guidelines: restrict the top level key objectives and measures of the scorecard to a single 8½ x 11 inch sheet of paper with 18-pica or larger font and a ratio of non-financial to financial metrics of 6 to 1. This numerical imbalance is based on the fact that initially, a financial measure has much greater organisational weight than non-financial measures based on the traditional bias manager exhibit to financial measures (Lipe and Salterio, 2000:283-298). Because of transitional design and process issues, new Balanced Scorecard companies have difficulty in identifying non-financial primary drivers and possibly an outside consultant should be brought in to help (Kaplan and Norton, 2001:360-377).

The difficulty in identifying scorecard metrics is compounded by the requirements of non-owner stakeholders like the employees, customers, suppliers, the community and the state. Organisations are adding social responsibility as a stakeholder requirement by including discretionary environmental initiatives, diversity and employee wellbeing in their list of strategic objectives. Unless these requirements are explicitly considered, a Balanced Scorecard can be at their expense (Schneiderman, 1999:6). With this in mind, the Balanced Scorecard easily becomes a balancing act; to balance the views of the various stakeholders and to make sure that each are represented. The Balanced Scorecard as a management tool will fail when it tries to balance the interests of all the stakeholders (Schneiderman, 1999:6). When this happens, the Balanced Scorecard ceases to become a focused operationally coherent strategy. Instead it has a tendency to become a list of indicators reflecting the preferences of each stakeholder. Thus at its best, the scorecard is a tool which focuses all parts of the business on the financial results and indicates in, explicit operational level terms, what the different parts of the

organisation must do to achieve this. At its worst, the Balanced Scorecard becomes a balanced brainstorm (Gering and Mntambo, 2001: 20).

In the case of the Trainer Development SBU the advantage of being a relatively small SBU, meant that lack of scorecard focus due to attempting to satisfy too many stakeholders, and thus identifying the wrong critical measures, was not the issue. It might have been if it were the implementation of a corporate or large SBU scorecard. The critical measures for the Trainer Development SBU were simply derived from its set revenue, growth and ROI (return on investment) targets needed to achieve its vision. From this point the critical non-financial measures were identified in each perspective needed to achieve the financial goals. This resulted in a scorecard resembling Schneiderman's (1999:6) suggested format of an 8½ x 11 inch sheet of paper in 18-pica font. This Scorecard was duly displayed in prominent places within the Trainer Development SBU as part of the implementation plan, to help reinforce the fact that these are the critical drivers/measures. (Blackbeard, 2004.)

3.3.1.2 The metrics are poorly defined

According to Schneiderman (1999:6), metrics can be classified as results (measures seen by the process customer) or process metrics (internal measures that cause the results). Results metrics are most useful as a management tool and are usually what appear on a scorecard. Process metrics are most useful to improvement teams since they focus attention on the places within the process where improvements will have the greatest impact. Good metrics, according to Schneiderman (1999:6), contain the following characteristics:

1. The metric is a reliable proxy for stakeholder satisfaction.
2. The metric is weakness or defect oriented (have an ideal value of zero) and continuously valued.
3. The metric is simple and easy to understand.
4. The metric is well documented, unambiguous, consistent, appropriately smoothed,

and has metrologically sound operational definitions.

5. The metric is timely and accessible to those who can best use them.
6. The metric is linked to an underlying data system that facilitates the identification of root causes of gaps in scorecard results.
7. Have a formal process for their continuous review and refinement.

Kaplan and Norton (1996:136) further suggest that good measures should be part of a complementing system of measures in order to avoid any one particular measure encouraging sub-optimisation. This system is commonly known as a causal model and looks at the cause and effect relationships between metrics, in order that they comply with the strategic objectives of the company (Ittner and Larker, 2003:88-95).

Within the Trainer Development SBU an example of this would be where a half-life metric is being used to try and reduce customer complaints to zero. When this metric is placed on a causal model it indicates the need for complimentary measures to avoid sub optimisation. Thus it was determined that the number of feedback forms received from customers, in relation to the total number of customers attending courses needed to be taken into account. This has been done order to ensure customers are given the opportunity to comment on service delivered and to qualify the half-life curve of customer complaints. (Blackbeard, 2004.)

Metrics need to be defined and maintained in a top down and bottom up process that combines the detailed knowledge of the process executors with the big picture of the executive. This need for joint ownership of metrics definition is often overlooked with the result being that the metrics are either un-actionable or disconnected from business objectives (Schneiderman, 1999:6). In order to ensure that this does not occur, the Trainer Development SBU has process executors i.e. course facilitators, on the scorecard development team. This team is responsible for creating the metrics and determining the causal relationships that are used to measure the achievement of objectives set by the executive, Anglo American Corporation head office (Blackbeard, 2004).

3.3.1.3 Improvement goals are negotiated

According to Schneiderman (1999:6), specific goals should be set, based on knowledge of the means that will be used to achieve them. Yet the resources available to achieve the goals are rarely known at the time goals are set. The result is goals being negotiated and from this situation two possible scenarios develop. Firstly, if the goal is too low the organisation will underachieve relative to its potential. Secondly, if the goals are too high, organisations will under perform relative to shareholder expectations. Both these scenarios, according to Schneiderman (1999:6), need to be avoided as they cause scepticism in the scorecard. This also tends to encourage self-serving managers to chose and manipulate measurements to enhance their own earnings and bonuses, while causing the company to underachieve relative to its capacity (Ittner and Larker, 2003:88-95).

In order to set rational goals and avoid the above two scenarios a means of predicting what is achievable, based on a standard means of improvement, is needed. Rather than negotiating scorecard goals, they should be based on knowledge of the required parameters set by the strategic plan, needed to be a successful organisation. This should then be applied to the knowledge gained through the use of an empirical model such as the half-life method. (Schneiderman, 1999:6.)

The structure and size of the Trainer Development SBU largely avoids the problem of negotiated sub-optimal goals as control and goal setting, remains for the most part, the responsibility of the SBU manager, who through experience has a good idea of what his team are capable of. The Trainer Development SBU has however, always used empirical models in goal setting and is now starting to use the half-life measure to set and achieve goals in traditionally difficult to measure areas like customer satisfaction. (Blackbeard, 2004.)

3.3.1.4 A proper deployment system is not used

Schneiderman (1999:6) puts forward that organisations all know that their financial systems consolidate data generated at the transaction level. For example, individual sales are aggregated to the product level, then to the product line level, and on until a total corporate sales number is calculated. This process can be reversed providing the

means to explain changes in total sales. Non-financial measures should in principle follow the same model used to calculate total sales.

Unfortunately, while sales are denominated in consistent units of currency, most non-financial measures have incomparable units. However, the value of deploying scorecards from the top to the bottom of the organisation is particularly beneficial in providing alignment of objectives both financial and non-financial (Fonvielle and Carr, 2001:4-14). Without this alignment, significant process improvements throughout the organisation fails to generate bottom line results at operational level. Figure 3.6 illustrates how the strategic goals should flow down the scorecard to operational level.

Schneiderman (1999:6) views scorecard deployment as a major activity in the management of Balanced Scorecards. Wherever possible and sensible, scorecard goals should be disaggregated and deployed downward in the organisation, to ensure that each employee understands their piece of the big picture and can share in the knowledge of their contribution to the organisation's overall success. Where this is not possible, fuzzy (indirect) linkages can be made (Schneiderman, 1999:6).

According to Stivers *et al.* (1998:46-49), a crude measurement which cannot be used for exact data may still indicate trends over time. Thus there is great value in even a subjective agreement that if all of the goals of subordinates are achieved, then a higher level goal will also be achieved, almost with certainty (Schneiderman, 1999:6).

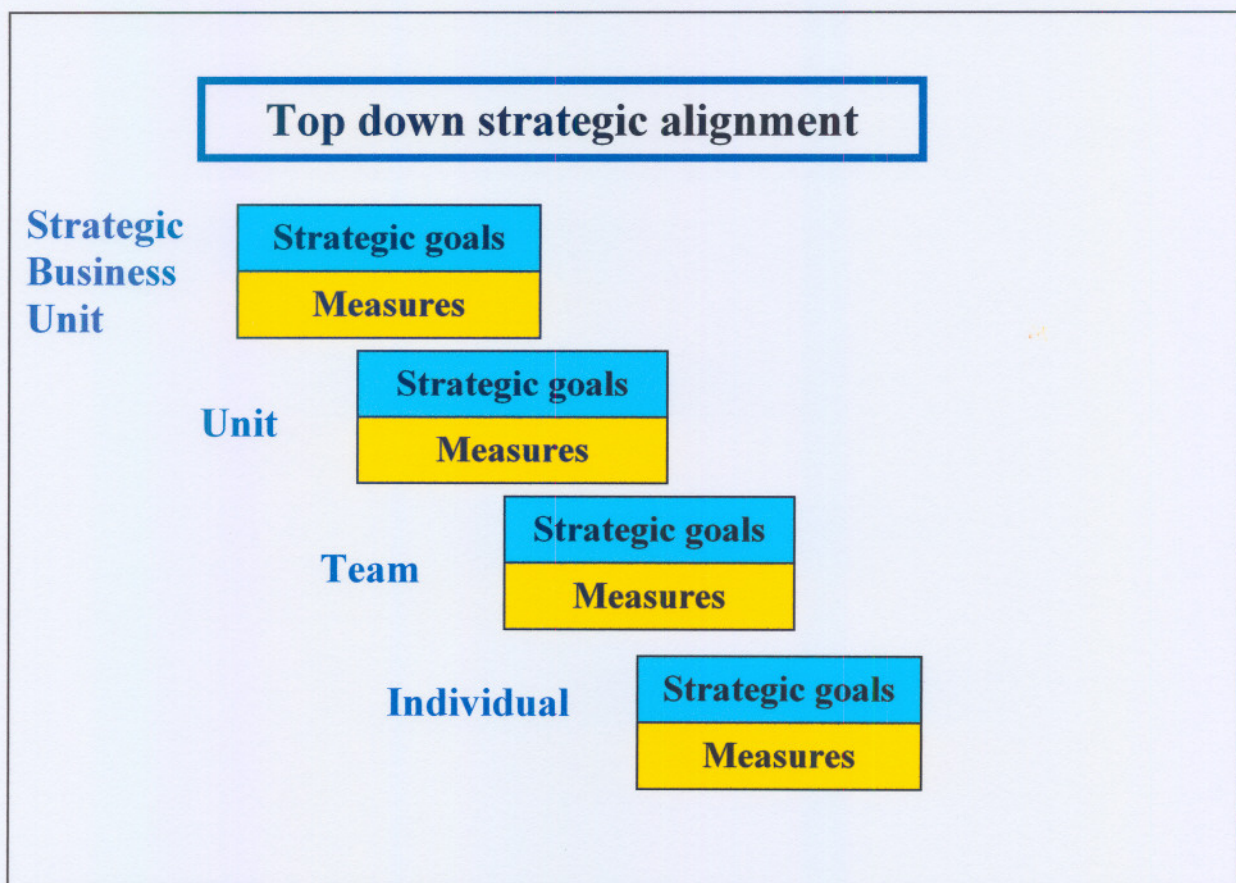
The Trainer Development SBU has taken great care to implement and cascade its scorecard down through its product managers to its facilitators. In September 2004 all the product managers attended courses regarding the further refining and cascading of the Balanced Scorecard to their subordinates (Blackbeard, 2004). In its Scorecard implementation the Trainer Development SBU used the following three distinct mechanisms, suggested Kaplan and Norton (1996:211-222), to ensure alignment and acceptance of the Balanced Scorecard.

1. Communication and Education Programmes: A prerequisite for implementing strategy is that all employees, senior corporate executives, and the board of directors understand the strategy and the required behaviour to achieve the

strategic objectives. A consistent and continuing programme to educate the organisation on the components of the strategy, as well as reinforcing this education with feedback on actual performance, is the foundation of organisational alignment.

2. **Goal-Setting Programmes:** Once the base level of understanding exists, individuals and teams throughout the business unit must translate the higher-level strategic objectives into personal and team objectives. The traditional management-by-objectives (MBO) programs used by most organisations should be linked to the objectives and measures articulated in the Balanced Scorecard.
3. **Reward System Linkage:** Alignment of the organisation toward the strategy must ultimately be motivated through the incentive and reward systems.

Figure 3.6 Strategic alignment flow chart



Source: Fonvielle and Carr, (2001:6).

3.3.1.5 A state of the art improvement system is not used.

According to Schneiderman (1999:6), there are well known organisations that still rely on trial and error as their official improvement methodology. Usually this indicates that they are missing essentials, such as: root cause analysis, verification of improvement, documentation of changes and feedback on the improvement process itself. Although improvement does occur by trial and error, the rates of improvement are less than 10% of what they might be. This is compounded by executives' natural tendency to expect improvement at a rate 10 times what it rationally could be; the combination thereof provides ample reason for frustration and scorecard failure. (Schneiderman, 1999:6.)

The Trainer Development SBU's improvement system makes use of MBO's linked to its performance bonus system. The MBO objectives are created through quality circles that are product group specific and tie directly into the product innovation perspective. To complete the loop employees are given feedback on their success in achieving the set MBO objectives. These results are also used to re-assess the improvement system strategy. (Blackbeard, 2004.)

To date this system has been successful in the SBU manager's opinion; however they are looking into investing in one of the more successful software programs to bolster their improvement system through improved administration and information systems (Blackbeard, 2004).

3.3.1.6 There is not and can not be a quantitative linkage between non-financial and expected financial results

According to Schneiderman (1999:6), the Balanced Scorecard is based on a premise that both the financial and non-financial sides of the scorecard are linked by a metaphorical equation. The non-financial measures represent the independent variables, the prospective or leading indicators of change. The financial measures are the dependant variables and are the retrospective, lagging indicators. However the organisation is not just the sum of its parts, it is a complex organic structure that interacts with the external environment. This means that organisational, technological

and environmental complexity complicate the above equation, making the link between financial and non-financial measures indistinct.

There is also research taking place about the applicability of the chaos theory to business systems; in the chaos theory, very small, even minute decisions have an unexpected yet profound and lasting effect on the organisation (Schneiderman, 1999:6).

This leads to the conclusion that no matter how good a Balanced Scorecard is, the long term survival of a company is not ensured; the odds are simply significantly increased.

3.4 SYNOPSIS

The first half of this chapter discussed the building and implementation of a Strategic business unit's first Balanced Scorecard. For this Kaplan and Norton's scorecard building and implementation plan was chosen. This was done on the basis that they are the original developers of the Balanced Scorecard and are widely regarded as the leading authority on the subject (Chow, Haddad, and Williamson, 1997:21), with regular publications on the Balanced Scorecard from 1992 to the time of this dissertation.

This plan comprises of four steps namely: building the implementation plan, selecting and designing measures, building consensus around strategic objectives and defining the measurement architecture. Consequently the Trainer Development SBU used Kaplan and Norton's (1996:300) Balanced Scorecard building and implementation plan to build their scorecard thus practical examples could be derived (Blackbeard, 2004). Further information on the subject of building and implementing scorecards can be derived from; Olve, Roy and Wetter (1999 48-49) as they have developed an alternate eleven step method which has a certain following.

In the second half of this chapter the possible reasons for Balanced Scorecard failure were discussed; as according Venkatraman and Gering (2004:1) there have been as many unsuccessful Balanced Scorecard implementations as there have been

successful ones. All these failures though seem to result from a common set of generic problems (Schneiderman 1999:1), which are:

1. The independent (i.e. non-financial) variables on the scorecard are incorrectly identified as the primary drivers of future stakeholder satisfaction.
2. The metrics are poorly defined.
3. Improvement goals are negotiated rather than based on stakeholder requirements, fundamental process limits and improvement process capabilities.
4. There is no deployment system that breaks high level goals down to the sub-process level where actual improvement activities reside.
5. A state of the art improvement system is not used.
6. There is not and can not be a quantitative linkage between non-financial and expected financial results.

Thus these scorecard pitfalls, suggested by Schneiderman (1999:1-6), were analysed and substantiated: it was also indicated how the Trainer Development SBU overcame them.

Chapter 3 is the final chapter of the literature review section of this study. The focus of the next two chapters is the substantiation of the Balanced Scorecard providing business advantage to the Trainer Development SBU. The following chapter, *Methodology*, reviews how this study was undertaken with regard to format, research instruments and statistical analysis.

CHAPTER 4

METHODOLOGY

4.1 INTRODUCTION

This chapter identifies the methodology and application thereof, used to determine if the Balanced Scorecard developed by Kaplan and Norton (Lipe and Salterio, 2000:283-298), provided any significant business advantage to the Trainer Development SBU.

Firstly, the data requirements and sample selection will be discussed. Secondly, the data gathering and instrument design will be covered and finally the survey methodology and statistical analysis of results will be reviewed.

4.2 METHODOLOGY REVIEW

4.2.1 Data gathering and analysis objectives

The data gathering and data analysis phase of this study has the following three objectives:

1. Gathering objective data about the financial performance (input and output) of those strategic business units (SBU's) selected for the study.
2. Analysing the data using multivariate statistical methods to explore the relationships between SBU success and Balanced Scorecard use.
3. To substantiate whether or not the Balanced Scorecard helped to create any business advantage for the Trainer Development SBU at Maccauvlei over a strategic business unit, that does not have a Balanced Scorecard in place.

4.2.2 Strategic business unit selection

For this research the Trainer Development and the Training and Development SBU's were selected. This was firstly based on the fact that the Trainer Development SBU has had a Balanced Scorecard in place for the last five years; while the Training and Development SBU did not have a Balanced Scorecard in place. Secondly, both the Trainer Development and the Training and Development SBU's are familiar with Balanced Scorecard philosophy and the theory behind it: as performance management training courses are run at Maccauvlei by their product managers, where Balanced Scorecard methodology forms part of the course content. Thirdly, these two SBU's are similar in structure, business sector, customer base and both are under Maccauvlei management. However, their products do differ in course content focus and number, although both are registered in the ETDP (Education Training and Development Practices) SETA (South African Education and Training Authority).

Table 4.1 Comparison between the Trainer Development and the Training and Development SBU for 2004:

Areas of comparison	Trainer Development SBU (Focus Group)	Training and Development SBU (Control Group)
SETA	ETDP	ETDP
Size	8 permanent staff	16 permanent staff
Location	Maccauvlei	Maccauvlei
Geographical coverage	Whole of Southern Africa	Whole of Southern Africa
Target customers	Training of HRD and trainers	Training of HRD and trainers
Products	7 Training courses	32 Training courses
Parent company	Anglo American Corporation	Anglo American Corporation

Source: Blackbeard and Hollenbach, (2004:7).

The similarity between the two strategic business units when compared will help to create a more objective view of the actual benefits provided by the Balanced Scorecard as the SBU without a Balanced Scorecard in place can be seen as a Control Group.

For the purposes of this study to avoid confusion due to their similar names, the Trainer Development SBU will be referred to as SBU A and the Training and Development

SBU will be referred to as SBU B.

4.2.3 Sample selection

According to Kaplan and Norton (1996:12), the Balanced Scorecard serves as a strategic level management tool for creating strategic objectives and identifying critical drivers. Hence this study focused on top level and secondary level management of the SBU's in question, as these functions fall into their job descriptions. The secondary management level will be divided into two Sample Groups, Sample Group A will represent the secondary management level of SBU A and Sample Group B will represent the secondary management level of SBU B. The managers in the secondary SBU management level, are called product managers in their respective SBU's.

4.2.4 Instrument selection

The instruments used for this study were determined by making use of an adapted evaluation criteria matrix (Table 4.2), originally developed by Smith, Delahaye and Gates (1986). This was done in order to choose the instruments that would derive the most relevant quantitative or qualitative data, while remaining within the criteria of time, cost and suitability to the relevant parties. Each instrument was rated according to these criteria and a total value was derived, where the highest totals represent the instruments used in this study. The explanation of the application of the evaluation criteria matrix is as follows:

Firstly, along the top row of the matrix the criteria (blue) were chosen and rated (blue figures) in order of their importance to the research. Secondly, the various methods (green) available to the study were listed on the left of the matrix. Thirdly, the matrix is filled in at the intersecting points of each criteria and method. This is done by giving the method a rating of 1 to 3 in order of its usefulness in evaluating the criteria; with 3 being the most useful. Consequently, the rating given (green figures) is multiplied by the importance rating of the criteria (blue figures) to give the value (red figures) in each block. Once all the blocks are filled in, they are added horizontally to give the bold red value in the total column. Those values which are underlined in the total column represent the highest values and thus the most useful methods and instruments to be used in the research.

Table 4.2 Evaluation criteria matrix

<u>Criteria</u>							
<u>Method</u>	SBU Manager Involved (6)	Sample Group involved (5)	Other interested parties involved (3)	Relevant quantative data (4)	Cost (2)	Time (1)	<u>Total</u>
Individual interview	3 18	1 5	2 6	2 8	3 6	2 2	<u>45</u>
Group interview	1 6	2 10	1 3	2 8	1 2	1 1	<u>30</u>
Questionnaire	1 6	3 15	1 3	3 12	3 6	3 3	<u>45</u>
Task analysis	1 6	2 10	1 3	3 12	1 2	1 1	<u>34</u>
Nominal group technique	1 6	3 15	1 3	2 8	1 2	1 1	<u>35</u>
Critical incident technique	1 6	1 5	1 3	1 4	1 2	1 1	<u>21</u>
Financial reports	2 12	1 5	2 6	3 12	3 6	3 3	<u>44</u>
Written theory examination	1 6	3 15	1 3	3 12	3 6	3 3	<u>45</u>

Source: Smith, Delahaye and Gates, (1986).

Table 4.3 indicates the results obtained from the evaluation criteria matrix (Smith, Delahaye and Gates, 1986). The suitable research instrument for the each of the research target population categories and their designation is indicated.

The Evaluation criteria matrix (Smith, Delahaye and Gates, 1986) indicated that a questionnaire and theory examination would be the most suitable method of research

when the relevant factors are taken into account for the product managers (Sample Group A and B). While the best method of research for SBU A's manager would be that of a structured individual interview.

Table 4.3 Selection of suitable research instruments

Research target population	Designation	Suitable research instrument
Top level SBU management	<ul style="list-style-type: none"> • Business unit manager (SBU A) 	<ul style="list-style-type: none"> • Individual structured interview
Secondary level SBU management (product managers)	<ul style="list-style-type: none"> • Product managers • HRD specialist <p>(for both Sample Group A and B)</p>	<ul style="list-style-type: none"> • Questionnaire • Theory examination

This has been further supplemented by the financial results of SBU A and SBU B for the period of 2000 to the predicted current year 2005. In order to show a more complete view of financial performance and to develop a correlation between financial performance and Balanced Scorecard usage. The financial measures to be used will be based on the core financial measures suggested by Kaplan and Norton (1996:306) to be generic in SBU scorecard's, as measures of financial success namely:

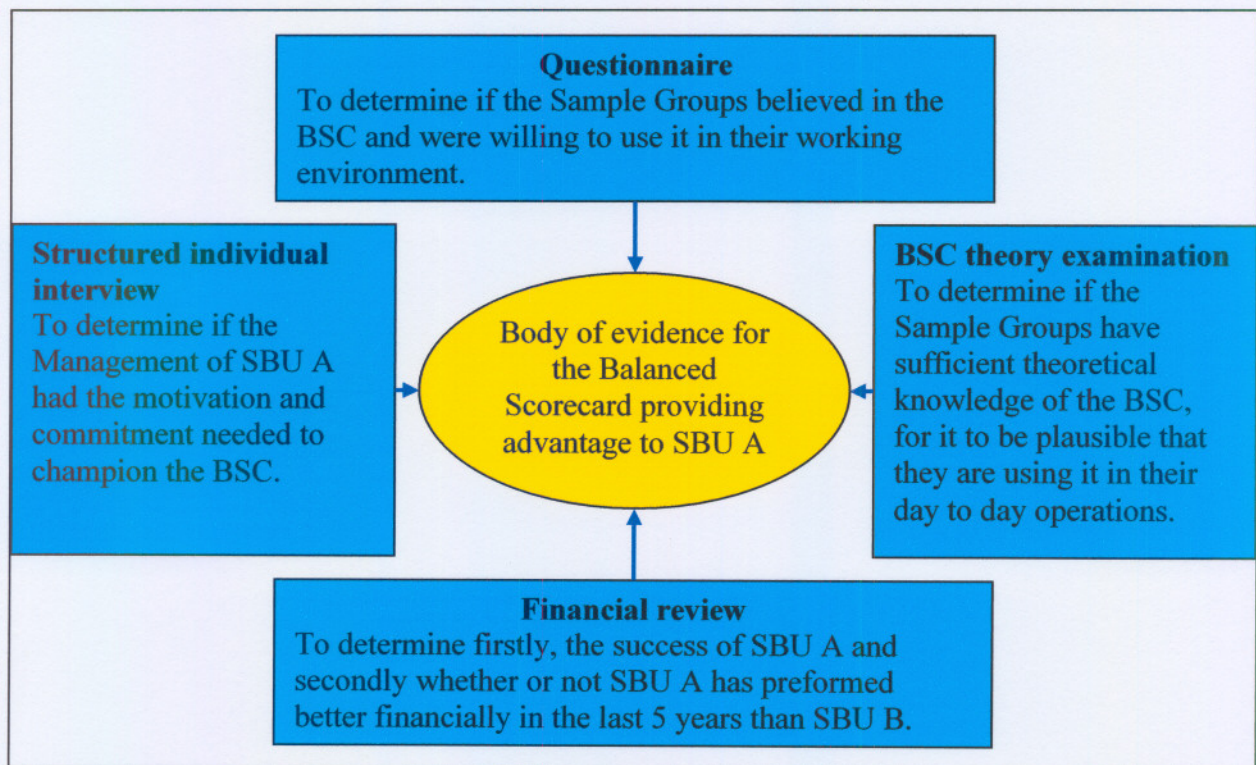
1. Return on investment (ROI)
2. Revenue generated per annum (profitability)
3. Revenue growth per annum
4. Cost reduction productivity (efficiency)

These measures, including SBU revenue contribution to Maccauvlei as a whole are consequently also the set determinants against which financial performance is measured at Maccauvlei. This will provide a more comprehensive view as to whether the Balanced Scorecard provided SBU A with any significant business advantage over SBU B.

These instruments are to be organised in to a four pronged approach in proving the hypothesis that the Balanced Scorecard used by SBU A provided business advantage

for the period 2000 to 2005 and contributed to it being more successful than SBU B. The reasoning behind this is that no single instrument can fully eliminate all result contamination through unforeseen variables. However, through the use of four instruments a far more convincing body of evidence can be developed; where the results obtained from the individual instruments can be used to validate each other and the instrument set as a whole. This four pronged approach for using the research instruments is illustrated in Figure 4.1.

Figure 4.1 The instrument set



Source: Author's research

4.3 INSTRUMENT DESIGN

4.3.1 Questionnaire

The questionnaire has been designed specifically for secondary level management (Sample Group A and B) i.e. the product managers of SBU A and SBU B. In accordance with the questioning guidelines suggested by Barnett (1991) in order that

concise, unambiguous and reliable questions could be developed. The questionnaire consisted of twenty questions; of which Section 1 is made up of fourteen questions or variables that will be in the form of a five point Likert scale on perceived Balanced Scorecard attributes. The following five alternatives represent the five-point Likert scale used in the questionnaire with their associated values.

1. Strongly disagree
2. Disagree
3. Undecided
4. Agree
5. Strongly agree

According to Siegle (2004), this is the most widely used five point Linkert scale of agreement and thus the best tested, resulting in more conclusive qualitative data. The results from these variables will then be rated according to a system whereby the Sample Group members' respective allocations per variable will be added to its respective dimension, which are as follows:

1. Promotion of motivation
2. Feasibility of the Balanced Scorecard
3. Promotion of teamwork
4. Long term commitment required
5. Understanding of the Balanced Scorecard
6. Clarity of goals and goal measurement
7. Feedback regularity
8. The possibility of Balanced Scorecard refinement

This value has been used to determine the mode, range and distribution of observations as subscribed by Barnett (1991). As Likert scales are not an interval scale and therefore no conclusions can be drawn regarding the significance of distances between the scale positions, the scale will be regarded as an ordinal and only the use of mode is permissible (Schnetler *et al.* 1989:68-69).

The dimensional modes were then analysed according to each Sample Group and

illustrated in graphical representations to prove whether, as theorised, the Balanced Scorecard provided advantage to SBU A. The data obtained from these dimensions should be viewed as qualitative in nature, as it was derived from the Sample Groups' collective perceptions and opinions of the value of the Balanced Scorecard. Each of the dimensions will now be discussed in more detail.

Dimension 1: Promotion of motivation

This dimension is included to determine if the Balanced Scorecard promotes motivation as perceived by the Sample Groups, based on:

- Reward based remuneration systems
- Collaboration in vision achievement

In the questionnaire this dimension is covered by variable 7 and 14.

Dimension 2: Feasibility of the Balanced Scorecard

The perception of the Sample Groups' regarding the feasibility of the Balanced Scorecard based on:

- Meeting of growth targets
- Effort required in creating and implementing the Balanced Scorecard translating into sustained long term growth.

In the questionnaire this dimension is covered by variable 2 and 3.

Dimension 3: Promotion of teamwork

This dimension includes the Sample Groups' perception regarding the promotion of teamwork by the Balanced Scorecard through:

- Common vision
- Complementing goals and objective

- Synergy

In the questionnaire this dimension is represented by variable 15.

Dimension 4: Long term commitment required

This dimension was included to determine the Sample Groups' perception of the period required for a Balanced Scorecard to provide business advantage and sustainable growth. This refers to variable 6 on the questionnaire and is based on Schneiderman (1999:6) stating that the Balanced Scorecard should be seen as a long term project of 5-10 years.

Dimension 5: Understanding of the Balanced Scorecard

This dimension explores the perceived understanding; the Sample Groups' believe they have of the Balanced Scorecard, relating to its basic philosophy and its effect on their jobs'. This is variable 4 and 8 in the questionnaire.

Dimension 6: Clarity of goals and goal measurement

This dimension covers the perception of the Sample Groups' regarding the clarity of goals and goal measurement within their respective SBU's in order to determine if the Balanced Scorecard provides a higher degree of goal clarity and effective measurement.

- Knowledge of goals and objectives for the current financial year
- Knowledge of the metrics that goal and objectives are rated against
- Measurement based on intangible and tangible goals

This dimension is represented in the questionnaire by variables 11, 12 and 17.

Dimension 7: Feedback regularity

The Sample Groups' perception of feedback regularity, based on their progress in achieving set goals and objectives, is identified in this dimension, with the purpose of determining whether or not the Balanced Scorecard provides for better goal monitoring

(measurement) and progress reporting. This dimension is represented by variable 13 in the questionnaire.

Dimension 8: The possibility of Balanced Scorecard refinement

This dimension explores the Sample Groups' belief that there is room for further adaptation of the Balanced Scorecard to South African conditions. When referred back to the questionnaire this dimension is covered by variable 20.1.

The final five questions form Section 2 of the questionnaire and request the Sample Groups' to provide information by means of suggestions relating to the following five topics:

1. Possible reasons for Balanced Scorecard failure.
2. Improvements to current SBU Balanced Scorecard.
3. Reasons for the popularity of the Balanced Scorecard approach to performance measurement.
4. Possible refinements that could be made to the Balanced Scorecard to cater for South African conditions.
5. Time period for positive results from an implemented Balanced Scorecard.

The suggestions derived from the Sample Groups' relating to section two of the questionnaire has been listed according to their prevalence; where number one will be the suggestion that was indicated by the most respondents in the Sample Group according to a tally chart.

To avoid the possibility of ambiguity, misunderstanding or confusion regarding the variables contained in the questionnaire, a pilot study was run using three individuals including SBU A's manager. They were required to complete the questionnaire and give feedback on its structure and completeness. This feedback was duly used to reword variables 5, 7 and 20.1 on the questionnaire. The revised questionnaire was then given to the pilot study group again, for assessment; where it was concluded that no further refinements to the questionnaire were necessary.

In order to validate the questionnaire and its findings, the questionnaire was used in a training needs analysis survey run at Maccauvlei in April 2004 involving SBU A and B, to determine the need for further training in Balanced Scorecard methodology and application. During this process the questionnaire was analysed and deemed acceptable in the Maccauvlei, National Higher Certificate in Occupational Directed Education, Training and Development Practice program.

A copy of the questionnaire used in this research is presented in the annexes section of this dissertation as Annexe A.

4.3.2 Theory examination

Sample Group A and B were required to complete a theory examination consisting of 10 variables in order to determine their level of theoretical knowledge of the Balanced Scorecard and its applications. This indicated whether they had sufficient working knowledge of the Balanced Scorecard to make it a contributing factor towards SBU success. As well as whether Sample Group A (SBU A), which makes use of the Balanced Scorecard, had a superior understanding thereof than Sample Group B (SBU B), who does not make use of the Balanced Scorecard. The examination was administered as a closed book examination, where each examinee individually completed an examination with a maximum period of 1 hour being allocated to this task. The question paper and mark sheet used in this examination were derived from Kaplan and Norton's (1996) publication 'The Balanced Scorecard', as this is the consolidation of the three Balanced Scorecard defining articles. The questions of the examination were chosen based on the critical knowledge needed to understand the Balanced Scorecard.

As with the questionnaire, this examination was validated through its use at Maccauvlei on SBU A and B product managers in a needs analysis done to determine the need for training in Balanced Scorecard methodology in April 2004.

A copy of the theory examination used in this research is presented in the annexes' section of this dissertation as Annexe B and the memorandum for the theory examination as Annexe C.

4.3.3 Structured individual interview

A structured individual interview consisting of 15 variables relating to the following six categories:

1. Period of Balanced Scorecard use.
2. Cascading the Balanced Scorecard down to middle management and operational level.
3. Origin of the current SBU Balanced Scorecard.
4. Has the current Balanced Scorecard promoted SBU success.
5. Possible adaptations and changes that could be made to the current Balanced Scorecard to make it better suited to South African business conditions.
6. Development and re-evaluation of the Balanced Scorecard.

Was completed with, the manager of SBU A, by the author of this dissertation. The purpose of this interview was to determine the value added by the Balanced Scorecard to SBU A. The quantitative and qualitative data gained through this structured interview has been used to form a better understanding of the Balanced Scorecard's benefits as the SBU manager has a more complete view of the SBU's functioning and thus uses of the Balanced Scorecard.

In developing the structured individual interview, the techniques and guidelines set by the National Higher Certificate in Occupational Directed Education, Training and Development Practice program were adhered to (Blackbeard, 1994:1-8). As with the questionnaire and theory examination, the structured interview was validated through its use at Maccauwei in a needs analysis done to determine the need for training in Balanced Scorecard methodology, in April 2004.

A copy of the structured individual interview and its memorandum are presented in the annexes' section of this dissertation as Annexe D. For the purposes of validity, the structured individual interview and informal information gathering interviews have all been recorded onto cassette tape.

4.3.4 Financial results review

The financial results review represents the quantitative part of this study and has been designed specifically for SBU A and SBU B, for the period of 2000 to the projected current year 2005. This has been done in order to indicate the relevant period of financial performance i.e. when SBU A used the Balanced Scorecard, and to develop a correlation between financial performance and Balanced Scorecard use. The financial measures used were based on the core financial measures, suggested by Kaplan and Norton (1996:306) to be generic in SBU scorecard's as measures of financial success namely:

1. Return on investment (ROI)
2. Revenue generated per financial year (profitability)
3. Revenue growth per annum
4. Cost reduction productivity (efficiency)

These measures, including SBU revenue contribution to Maccauveli as a whole, are consequently also the set determinants against which financial performance is measured at Maccauveli. Thus a comparison can be made between SBU A and SBU B to determine if SBU A performed better as a result of its Balanced Scorecard.

Each of Kaplan and Norton's (1996:306) generic measures of SBU financial success will be discussed in more detail.

1. Return on investment (ROI) forms the primary financial measure in this study. According to Zimmerman (1997:23) ROI is the profit achieved within the decision making unit (SBU) relative to its nominal asset base. ROI allows for an easy comparison between SBU's and is represented as a decimal ratio.

$$\text{ROI} = \text{Profit (net income)} / \text{Nominal asset base}$$

2. Revenue generated per annum, representing the profit or net income for the period of one financial year.

3. Revenue growth per annum will be undertaken as a comparison between SBU A and SBU B's net income growth from 2000 to projected 2005. This has been represented as a percentage growth in net income and accompanied by a graphical illustration.
4. Cost reduction productivity has been represented and compared within SBU A and B as total costs per financial year incurred by each SBU respectively.

4.4 SYNOPSIS

This chapter reviewed the research methodology applied in this study. The objective was to gather and analyse data in an effort to contribute knowledge and understanding of the advantage gained by SBUs using the Balanced Scorecard in particular the Trainer Development SBU at Maccauvlei. Data was gathered along application and process dimensions of Balanced Scorecard usage. The research design consisted of multivariate statistical methods, employee and management perception and financial results; to explore the relationship between the performance of two SBUs and Balanced Scorecard usage. The focus being placed on whether the SBU using the Balanced Scorecard experienced any significant advantage over the SBU that did not.

The sampling procedure was explained and resulted in a total of ten secondary level managers in the final two Sample Groups; four in Sample Group A and six in Sample Group B. Ten respondents completed the questionnaire and theory examination which calculates into a 100 percent response rate for the final sample size.

These results were further supplemented by a structured individual interview and a financial results review of the two SBUs in question. The structured individual interview involved the Trainer Development SBU manager, where information and perceptions regarding the SBU Balanced Scorecard was covered.

The Financial results review is in the form of a comparison between the two SBUs for the period of 2000 to the projected current year 2005. This financial review is based on the core SBU financial measures suggested by Kaplan and Norton (1996:306).

The data set was captured in the Microsoft Excel software program and consequently prepared for statistical analysis. From here the study advances towards the data analysis stage of the survey and will be further discussed in Chapter 5.

CHAPTER 5

RESULTS AND DATA ANALYSIS

5.1 INTRODUCTION

This chapter contains the feedback received from the questionnaire, theory test, structured interview and relevant financial results of the Sample Groups and SBUs discussed in Chapter 3. With the aim of gaining a better understanding as to whether the Balanced Scorecard provided business advantage to the Trainer Development strategic business unit (SBU A). The results will be analysed through descriptive statistics and summarized into graphical representations and tables, in order that a concise, clear picture of their validity, relevance and significance can be formed. In this research the following ethical guidelines were adhered to:

1. To treat all information obtained by means of the questionnaire in the strictest confidence.
2. To use the information only for the purposes of this study and not for any other purpose.
3. Not to mention any individual names or to phrase my research report in such a way that anybody who might read the report, will have any clue as to what information relates to which individual.

5.2 SUMMARY OF QUESTIONNAIRE RESULTS

All the members of Sample Group A and B were required to complete a twenty question questionnaire about the Balanced Scorecard's perceived benefits. This was done in two sections where Section 1 was made up of fourteen Likert style questions of agreement on a five point scale, these questions or variables will follow the same numbering as in the questionnaire to allow for easy cross reference. The Fourteen Likert style variables represent eight dimensions which are as follows:

1. Promotion of motivation
2. Feasibility of the Balanced Scorecard
3. Promotion of teamwork
4. Long term commitment required
5. Understanding of the Balanced Scorecard
6. Clarity of goals and goal measurement
7. Feedback regularity
8. The possibility of Balanced Scorecard refinement

The analysis of the Likert style questions will be done by dimension for both Sample Groups and where possible comparisons will be drawn.

Section 2 of the questionnaire consists of four longer 'suggestion' type questions and one time frame question, involving Balanced Scorecard implementation and adaptation. These suggestion questions will be analysed according to a tally chart whereby the most common suggestions will be listed highest. Again this will be done for both Sample Groups and where possible comparisons will be drawn.

5.2.1 The results for Section 1 of the questionnaire

Results and descriptive statistical analysis of the Likert style variables will be based on a five point scale, whereby values from 1 - 5 will be assigned to each of the possibilities. The Likert scale used and their values are indicated in following table.

Table 5.1 Likert scale value

Value	Scale of agreement
1	Strongly Disagree
2	Disagree
3	Undecided
4	Agree
5	Strongly Agree

According to Siegle (2004), this is the most widely used five point Linkert scale of agreement and thus the best tested, resulting in more conclusive qualitative data. The

results from these questions/variables will then be rated according to a system whereby the Sample Group members' respective allocations per variable will be added to its respective dimension. The dimensions and corresponding variables are indicated below.

Table 5.2 Dimension variable relationship

No.	Dimension	Variable
D1	Promotion of motivation	V7 & V14
D2	Feasibility of the Balanced Scorecard	V2 & V3
D3	Promotion of teamwork	V15
D4	Long term commitment required	V6
D5	Understanding of the Balanced Scorecard	V8 & V4
D6	Clarity of goals and goal measurement	V11, V12 & V17
D7	Feedback regularity	V13
D8	The possibility of Balanced Scorecard refinement	V20.1

These values will be used to determine the mode, range and distribution of observations as subscribed by Barnett (1991). Likert scales are not an interval scale and therefore no conclusions can be drawn regarding the significance of distances between the scale positions. The scale will thus be regarded as ordinal in nature and only the use of mode is permissible (Schnetler *et al.* 1989:68-69). Each dimension will now be discussed, its descriptive statistical analysis will be tabulated and where possible comparisons will be drawn between Sample Groups.

5.2.1.1 Dimension 1:

Whether or not Balanced Scorecard inspired management techniques serve as a motivational tool through greater participation and goal understanding.

Sample Group A

V 7	Variable	7				
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Agree	4	2	50.0	50.0	50.0	
Strongly agree	5	2	50.0	50.0	100.0	
Total		4	100.0	100.0		
Mode	Agree & Strongly Agree					
Valid cases	4	Missing cases	0			

Sample Group A

V	14	Variable	14			
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Not sure	3	1	25.0	25.0	25.0	
Agree	4	2	50.0	50.0	75.0	
Strongly agree	5	1	25.0	25.0	100.0	
Total		4	100.0	100.0		
Mode		Agree				
Valid cases	4	Missing cases	0			

The combined mode of V7 and V14 is 4, indicating that Sample Group A agree the Balanced Scorecard provided motivation through its existence.

Sample Group B

V	7	Variable	7			
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Agree	4	4	66.6	66.6	66.6	
Strongly agree	5	2	33.3	33.3	100.0	
Total		6	100.0	100.0		
Mode		Agree				
Valid cases	6	Missing cases	0			

V	14	Variable	14			
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Strongly disagree	1	1	16.6	16.6	16.6	
Not sure	3	2	33.3	33.3	50.0	
Agree	4	3	50.0	50.0	100.0	
Total		6	100.0	100.0		
Mode		Agree				
Valid cases	6	Missing cases	0			

The combined mode of V7 and V14 is 4, indicating that Sample Group B agree the Balanced Scorecard provided motivation through its existence.

Comparison between Sample Group A and B for D1:

Both Sample Groups indicated a mode of 4 (agree) for the Balanced Scorecard providing motivation.

5.2.1.2 Dimension 2:

The feasibility of the Balanced Scorecard i.e. the benefits derived out-weighs the cost.

Sample Group A

V 2	Variable	2				
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Agree	4	2	50.0	50.0	50.0	
Strongly agree	5	2	50.0	50.0	100.0	
Total		4	100.0	100.0		
Mode		Agree / Strongly Agree				
Valid cases	4	Missing cases	0			

V 3	Variable	3				
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Undecided	3	1	25.0	25.0	25.0	
Agree	4	2	50.0	50.0	75.0	
Strongly agree	5	1	25.0	25.0	100.0	
Total		4	100.0	100.0		
Mode		Agree				
Valid cases	4	Missing cases	0			

The combined mode of V2 and V3 is 4, indicating that the Sample Group A agreed the Balanced Scorecard is feasible. The cost and time taken to create it, is out-weighted by business advantage.

Sample Group B

V 2	Variable	2				
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Undecided	3	1	16.6	16.6	16.6	
Agree	4	3	50.0	50.0	66.6	
Strongly agree	5	2	33.3	33.3	100.0	
Total		6	100.0	100.0		
Mode		Agree				
Valid cases	6	Missing cases	0			

V 3	Variable	3				
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Strongly disagree	1	1	16.6	16.6	16.6	
Undecided	3	4	66.6	66.6	83.3	
Agree	4	1	16.6	16.6	100.0	
Total		6	100.0	100.0		
Mode		Undecided				
Valid cases	6	Missing cases	0			

The combined mode of V2 and V3 is 3, indicating that Sample Group B is undecided as to the feasibility of the Balanced Scorecard.

Comparison between Sample Group A and B for D2:

Sample Group A agreed the Balanced Scorecard is feasible; while Sample Group B were undecided. This is relevant as Sample Group A has a Balanced Scorecard in place with first hand experience thereof; while Sample Group B only has knowledge thereof, possibly indicating that Sample Group A have derived advantage from the Balanced Scorecard and thus rate it more highly in regards to feasibility.

5.2.1.3 Dimension 3:

Whether or not Balanced Scorecard inspired management techniques serve as a promoting factor in team work within the SBU.

Sample Group A

V	15	Variable	15			
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Undecided	3	1	25.0	25.0	25.0	
Strongly agree	5	3	75.0	75.0	100.0	
Total		4	100.0	100.0		
Mode		Strongly agree				
Valid cases	4	Missing cases	0			

Sample Group B

V	15	Variable	15			
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Strongly disagree	1	1	16.6	16.6	16.6	
Undecided	3	2	33.3	33.3	50.0	
Agree	4	2	33.3	33.3	66.6	
Strongly agree	5	1	16.6	16.6	100.0	
Total		6	100.0	100.0		
Mode		Agree & Undecided				
Valid cases	6	Missing cases	0			

Comparison between Sample Group A and B for D3:

Sample Group A strongly agreed that the Balanced Scorecard promotes team work; while Sample Group B both agree and are undecided. This is significant as Sample Group A has a Balanced Scorecard in place with first hand experience thereof; while Sample Group B only has knowledge thereof, possibly indicating that Sample Group A has experienced improved team work through the Balanced Scorecard.

5.2.1.4 Dimension 4:

Whether or not the Balanced Scorecard requires a long term commitment to provide business advantage to a SBU.

Sample Group A

V	6	Variable	6			
Value label (range)		Value	Frequency	Percent	Valid percent	Cumulative percent
Agree		4	3	75.0	75.0	75.0
Strongly agree		5	1	25.0	25.0	100.0
Total			4	100.0	100.0	
Mode		Agree				
Valid cases		4	Missing cases	0		

Sample Group B

V	6	Variable	6			
Value label (range)		Value	Frequency	Percent	Valid percent	Cumulative percent
Disagree		2	1	16.6	16.6	16.6
Agree		4	3	50.0	50.0	66.6
Strongly agree		5	2	33.3	33.3	100.0
Total			6	100.0	100.0	
Mode		Agree				
Valid cases		6	Missing cases	0		

Comparison between Sample Group A and B for D4:

Both Sample Groups agree that the undertaking of a Balanced Scorecard should be viewed as a long term project.

5.2.1.5 Dimension 5:

Whether or not the Sample Groups agree that they have an understanding of the Balanced Scorecard with regard to its workings and structure.

Sample Group A

V 4	Variable	4				
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Agree	4	4	100.0	100.0	100.0	
Total		4	100.0	100.0		
Mode		Agree				
Valid cases	4	Missing cases	0			

V 8	Variable	8				
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Agree	4	2	50.0	50.0	50.0	
Strongly agree	5	2	50.0	50.0	100.0	
Total		4	100.0	100.0		
Mode		Agree & Strongly Agree				
Valid cases	4	Missing cases	0			

The combined mode of V4 and V8 is 4, indicating that Sample Group A agree that they have an understanding of the Balanced Scorecard.

Sample Group B

V 4	Variable	4				
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Undecided	3	3	50	50	50	
Agree	4	2	33.3	33.3	83.3	
Strongly agree	5	1	16.6	16.6	100.0	
Total		6	100.0	100.0		
Mode		Undecided				
Valid cases	6	Missing cases	0			

V 8	Variable	8				
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Strongly disagree	1	1	16.6	16.6	16.6	
Disagree	2	4	66.6	66.6	83.3	
Agree	4	1	16.6	16.6	100.0	
Total		6	100.0	100.0		
Mode		Disagree				
Valid cases	6	Missing cases	0			

The combined mode of V4 and V8 is 2, indicating that Sample Group disagree that they have an understanding of the Balanced Scorecard.

Comparison between Sample Group A and B for D5:

Sample Group A agrees they have an understanding of the Balanced Scorecard while Sample Group B indicates they disagree. This again corresponds with Balanced Scorecard usage and non-usage.

5.2.1.6 Dimension 6:

Whether or not the Balanced Scorecard provides for clarity of goals and goal measurement procedures.

Sample Group A

V 11 Variable 11						
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Agree	4	1	25.0	25.0	25.0	
Strongly agree	5	3	75.0	75.0	100.0	
Total		4	100.0	100.0		
Mode		Strongly Agree				
Valid cases	4	Missing cases	0			

V 12 Variable 12						
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Agree	4	1	25.0	25.0	25.0	
Strongly agree	5	3	75.0	75.0	100.0	
Total		4	100.0	100.0		
Mode		Strongly Agree				
Valid cases	4	Missing cases	0			

V 17 Variable 17						
Value label (range)	Value	Frequency	Percent	Valid percent	Cumulative percent	
Undecided	3	2	50.0	50.0	50.0	
Agree	4	1	25.0	25.0	75.0	
Strongly agree	5	1	25.0	25.0	100.0	
Total		4	100.0	100.0		
Mode		Undecided				
Valid cases	4	Missing cases	0			

The combined mode of V11, V12 and V17 indicate that the Sample Group strongly agree that the Balanced Scorecard provides for clarity in goals and goal measurement.

Sample Group B

V	11	Variable	11			
Value label (range)		Value	Frequency	Percent	Valid percent	Cumulative percent
Agree		4	4	66.6	66.6	66.6
Strongly agree		5	2	33.3	33.3	100.0
Total			6	100.0	100.0	
Mode		Agree				
Valid cases		6	Missing cases	0		

V	12	Variable	12			
Value label (range)		Value	Frequency	Percent	Valid percent	Cumulative percent
Disagree		2	1	16.6	16.6	16.6
Undecided		3	2	33.3	33.3	50.0
Agree		4	3	50.0	50.0	100.0
Total			6	100.0	100.0	
Mode		Agree				
Valid cases		6	Missing cases	0		

V	17	Variable	17			
Value label (range)		Value	Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree		1	1	16.6	16.6	16.6
Disagree		2	1	16.6	16.6	33.3
Agree		4	3	50	50	83.3
Strongly agree		5	1	16.6	16.6	100.0
Total			6	100.0	100.0	
Mode		Agree				
Valid cases		6	Missing cases	0		

The combined mode of V11, V12 and V17 indicate that the Sample Group agrees that the Balanced Scorecard provides for clarity in goals and goal measurement.

Comparison between Sample Group A and B for D6:

Both Sample Groups agree the Balanced Scorecard provides for clarity in goals and goal measurement, however Sample Group A strongly agrees.

5.2.1.7 Dimension 7:

Whether or not the Balanced Scorecard provides for regular feedback in regards to goal achievement.

Sample Group A

V	13	Variable	13			
Value label (range)		Value	Frequency	Percent	Valid percent	Cumulative percent
Agree		4	3	75.0	75.0	75.0
Strongly agree		5	1	25.0	25.0	100.0
Total			4	100.0	100.0	
Mode		Agree				
Valid cases		4	Missing cases	0		

Sample Group B

V	13	Variable	13			
Value label (range)		Value	Frequency	Percent	Valid percent	Cumulative percent
Disagree		2	1	16.6	16.6	16.6
Agree		4	5	83.3	83.3	100.0
Total			6	100.0	100.0	
Mode		Agree				
Valid cases		6	Missing cases	0		

Comparison between Sample Group A and B for D7:

Both the Sample Groups agree the Balanced Scorecard provides for regular feedback in goal achievement.

5.2.1.8 Dimension 8:

Whether or not the Balanced Scorecard can be further refined to South African business conditions.

Sample Group A

V	20.1	Variable	20.1			
Value label (range)		Value	Frequency	Percent	Valid percent	Cumulative percent
Agree		4	3	75.0	75.0	75.0
Strongly agree		5	1	25.0	25.0	100.0
Total			4	100.0	100.0	
Mode		Agree				
Valid cases		4	Missing cases	0		

Sample Group B

V	20.1	Variable	20.1			
Value label (range)		Value	Frequency	Percent	Valid percent	Cumulative percent
Undecided		3	2	33.3	33.3	33.3
Agree		4	3	50.0	50.0	83.3
Strongly agree		5	1	16.6	16.6	100.0
Total			6	100.0	100.0	
Mode		Agree				
Valid cases		6	Missing cases	0		

Comparison between Sample Group A and B for D8:

Both Sample Groups agree the Balanced Scorecard can be further refined to South African conditions.

Table 5.3 is a comparison between Sample Group A and B; the mode and range of the responses in both Sample Groups for dimension 1 to 8 are indicated.

Table 5.3 Comparison of Sample Group A and B: Section 1 of the questionnaire.

Dimension (D)	Variable (V)	Mode		Range	
		Sample A	Sample B	Sample A	Sample B
D1: Promotion of motivation	V7 + V14	4	4	3 - 5	1 - 5
D2: Feasibility of the Balanced Scorecard	V2 + V3	4	3	3 - 5	1 - 5
D3: Promotion of teamwork	V15	5	4 & 3	3 - 5	1 - 5
D4: long term commitment	V6	4	4	4 - 5	2 - 5
D5: Understanding of the Balanced Scorecard	V8 + V4	4	2	4 - 5	1 - 5

Dimension	Variable	Mode		Range	
		Sample A	Sample B	Sample A	Sample B
D6: Clarity of goals and goal measurement	V11, V12 + V17	5	4	3 - 5	1 - 5
D7: Feedback regularity	V13	4	4	4 - 5	2 - 4
D8: Possibility for Balanced Scorecard refinement	V20.1	4	4	4 - 5	3 - 5

5.2.1.9 Graphical representation of the results of Section 1 of the questionnaire

The bar graphs in Figure 5.1 represent the results of Section 1 of the questionnaire. Table 5.4 indicates how the Likert scale of agreement was assigned a value, then multiplied by 20 so that a scale of 100 could be achieved to simplify calculation and results presentation for Figures 5.1, 5.2 and 5.3. Figure 5.4 displays the mean for dimension 1 to 8 as well as the total average mean across all the dimensions for Sample Group A and B.

Table 5.4 Likert scale key for graphical analysis

Value	Likert scale of agreement	Value multiplied by 20
1	Strongly Disagree	20
2	Disagree	40
3	Undecided	60
4	Agree	80
5	Strongly Agree	100

Figure 5.1 Sample Group A individual questionnaire results

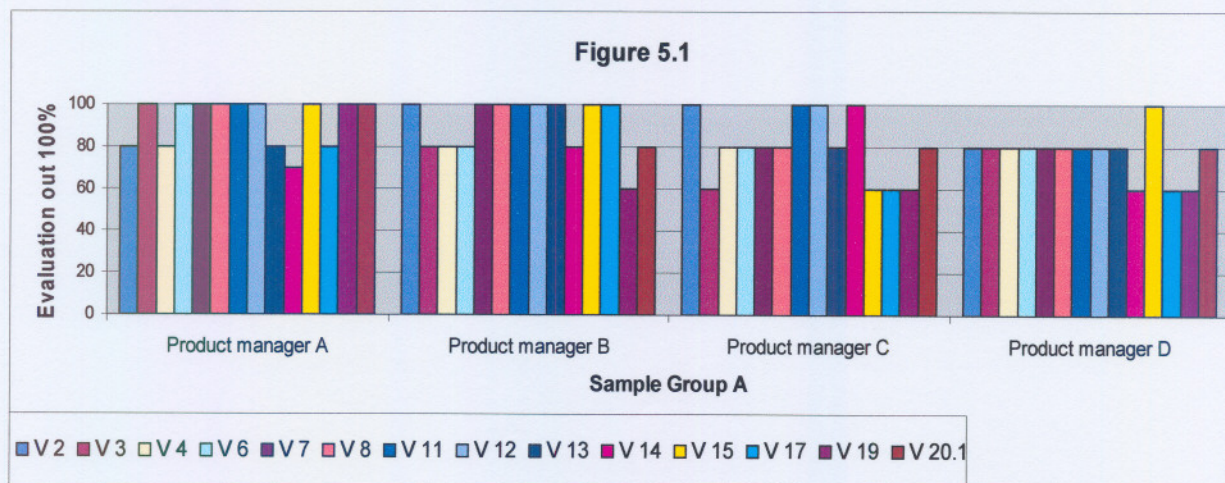


Figure 5.1 represents the response of the individual respondents in Sample Group A for: V2 - V4, V6 – V8, V11 – V15, V17 and V20.1.

Figure 5.2: Represents the response of the individual respondents in Sample Group B for: V2 - V4, V6 – V8, V11 – V15, V17 and V20.1.

Figure 5.2 Sample Group B individual questionnaire results

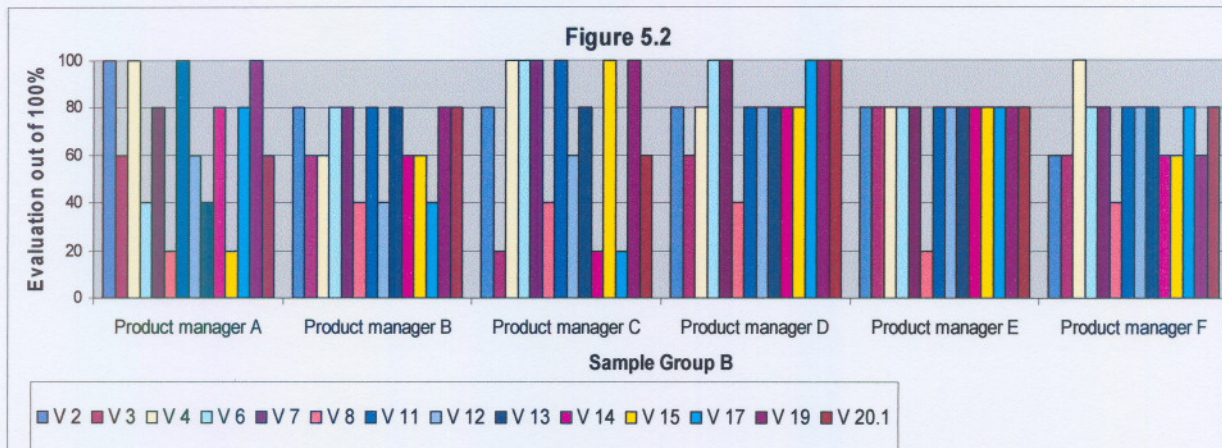


Figure 5.3: Represents a comparison of the modes derived from Sample Group A and B for D1 - D8.

Figure 5.3 Comparison of Sample Group A and B questionnaire results

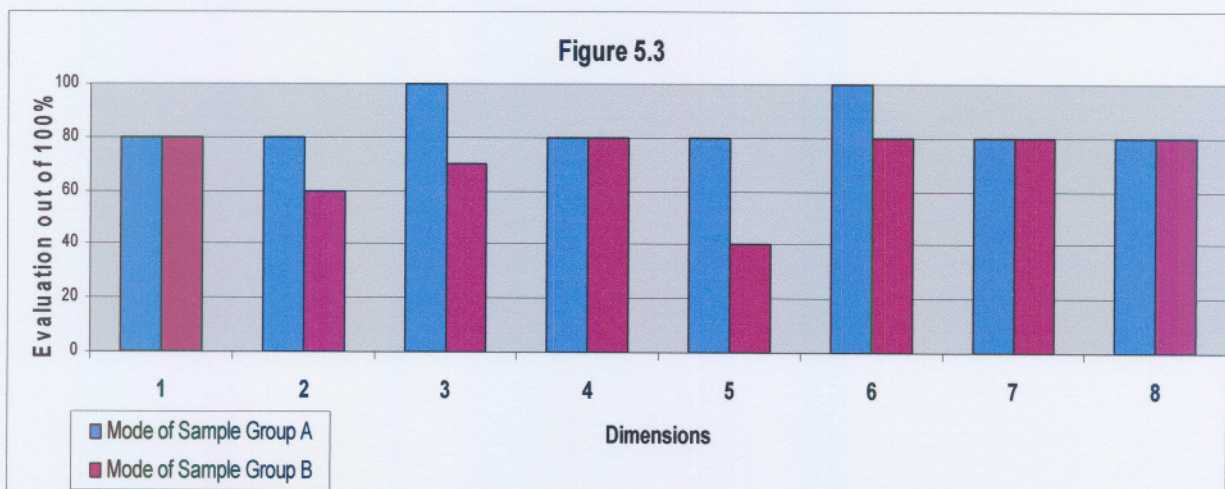
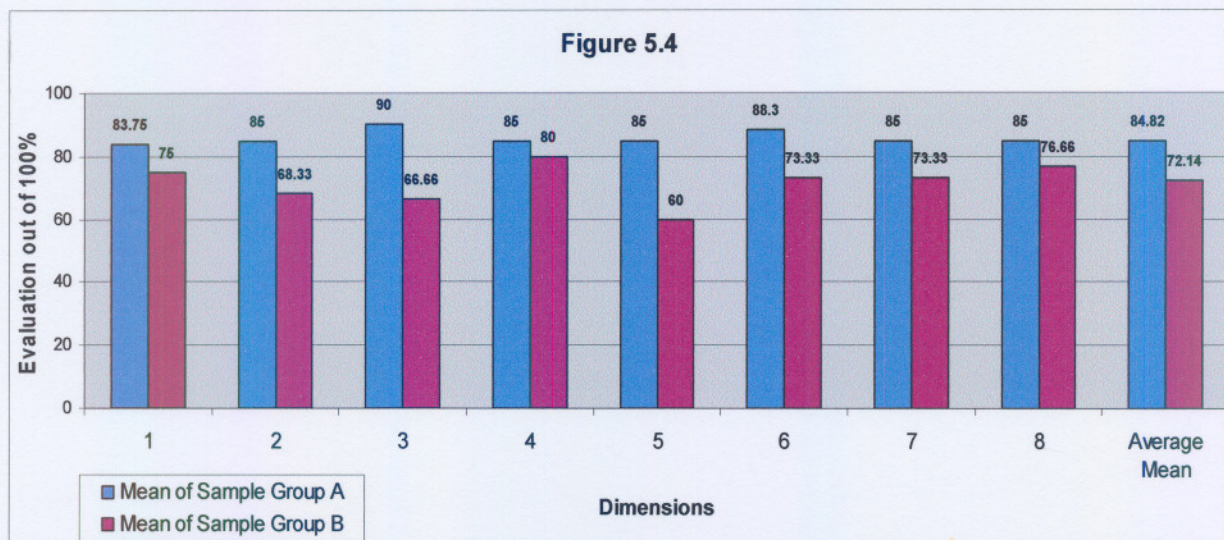


Figure 5.4 represents the mean across dimensions 1 to 8; with the mean calculated per Sample Group. Sample Group A's mean was 84.82% while Sample Group B's mean was 72.14%. In pure statistical analysis the use of mean values in the evaluation of Likert scales is not verified; however it has been used in this research as a general indicator to the likelihood that Sample Group A views the Balanced Scorecard in a more positive frame than Sample Group B. This has been indicated by Sample Group A having a total mean that is 12.68% higher than Sample Group B, possibly indicating a more positive attitude towards Balanced Scorecard use.

Figure 5.4 Comparison between Sample Group A and B questionnaire mean values



5.2.2 Questionnaire results for Section 2

Section 2 of the questionnaire represents 'suggestion' type questions where a tally chart is used to determine the most popular response; these has been listed in numerical order with one being the most popular response. Section 2 consists of five variables namely: V9, V10, V18, V20.2 and V5. Each of these variable results are discussed below in more detail.

V9. The primary reasons for Balanced Scorecard failure as suggested by the Sample Groups.

Sample Group A

1. Strategic business unit managers not driving the Balanced Scorecard consistently.
2. Poorly defined objectives linked to measures.
3. The corporate strategies and objectives are not cascaded properly into strategic business unit objectives and strategies thus alignment can not be achieved.
4. Lack of proper feedback and follow up.
5. Lack of scorecard buy in by all concerned parties.

Sample Group B

1. Lack of top management support.
2. Lack of clear objectives.
3. Lack of proper planning.
4. Lack of proper communication.
5. Lack of Balanced Scorecard ownership.
6. Lack of systematic Balanced Scorecard follow up.

V10. The changes that could be made to improve SBU A's Balanced Scorecard, as put forward by Sample Group A.

Sample Group A

1. Training in the application of the Balanced Scorecard in different contexts, as well as more detailed theory training.
2. Task complexity to be taken into account in Balanced Scorecard measurement weights.
3. Training in Balanced Scorecard cascading techniques.

(Not applicable to Sample Group B as SBU B does not have a Balanced Scorecard in place)

V18. Reasons given for the popularity of the Balanced Scorecard as suggested by the Sample Groups.

Sample Group A

1. The Balanced Scorecard provides for synergy in corporate and SBU strategy.
2. The Balanced Scorecard provides for measurement of both tangible and intangible business activities.
3. The Balanced Scorecard is both adaptable and relatively easily understood.

Sample Group B

1. The Balanced Scorecard provides focus on core business activities.
2. The benefits of the Balanced Scorecard have been proven worldwide.
3. The Balanced Scorecard provides a realistic, holistic, multi-perspective approach to measuring business activities and if necessary additional perspectives can be added to further adapt to business needs.
4. The Balanced Scorecard links business vision, strategy and objectives.

V20.2. Possible adaptations that could be made to the Balanced Scorecard structure and framework for South African conditions.

Sample Group A

1. Case studies of local Balanced Scorecard applications can be developed.
2. Greater focus on diversity issues and the legal requirements related to South Africa's unique business environment.
3. Simplification of Balanced Scorecard terminology.

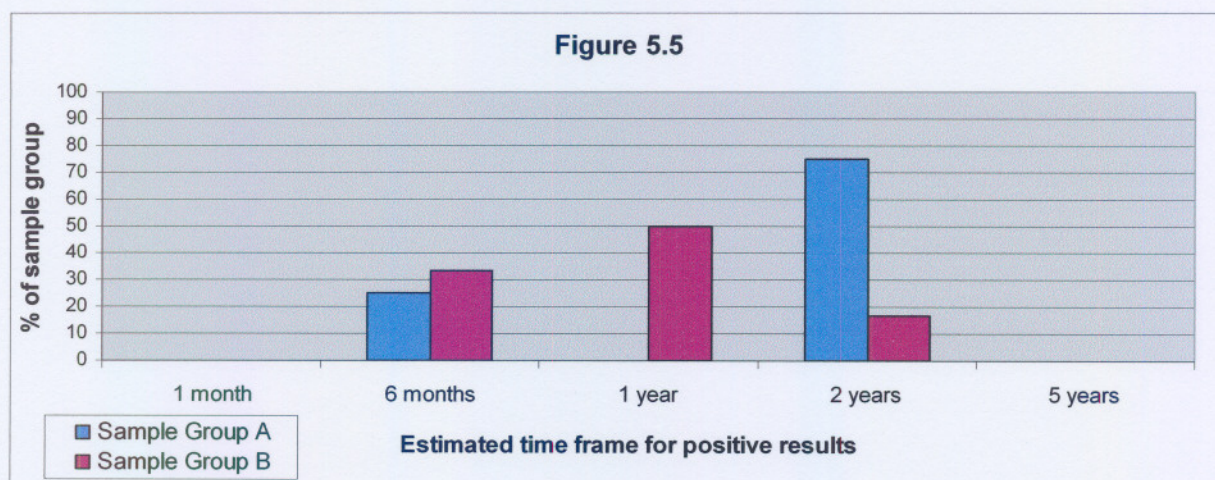
Sample Group B

1. More practical case studies of local Balanced Scorecard applications can be developed.
2. The Balanced Scorecard should include 360 degree feedback.
3. Greater focus on diversity issues and the legal requirements related to South Africa's unique business environment.

V5. This is a time scale variable, used to determine the period of time the respondents in both Sample Groups believe an implemented Balanced Scorecard will take to affect positive improvement within a SBU.

Figure 5.5 represents the time frame involved in positive results (benefits) being realised from an implemented Balanced Scorecard as per Sample Group A and B.

Figure 5.5 Time frame for expected positive results



Sample Group A favours 2 years; while Sample Group B favours 1 year. This suggests that Sample Group A, through first hand experience, has a better understanding of the long term commitment involved in achieving positive results through Balanced Scorecard usage.

5.2.3 Summary of Section 1 and 2 of the questionnaire:

Sample Group A and B agree that the Balanced Scorecard promotes motivation amongst employees through accurate, goal measurement linked to remuneration structures. Although Sample Group A agrees that the Balanced Scorecard is a feasible undertaking, in other words the benefits of implementing a Balanced Scorecard outweigh the costs; Sample Group B are undecided. However, both Sample Groups agree that the Balanced Scorecard improves teamwork through focussed objective and goal linking, although Sample Group A agrees more strongly.

Both Sample Groups agree the Balanced Scorecard requires long term commitment. However, the majority of Sample Group A, who have first hand practical experience with the Balanced Scorecard estimate the period before positive change occurring due to a scorecard at 2 years. While Sample Group B with no practical scorecard experience estimated 1 year.

Sample Group A agreed that they have an understanding of the Balanced Scorecard and this corresponds with the theory examination, where they averaged 65% (Figure 5.6). Sample Group B disagrees that they have a good understanding of the Balanced Scorecard concept and again this corresponds with their average of 41% (Figure 5.7) for the theory examination.

Sample Group A strongly agrees that the Balanced Scorecard provides for clear focussed goals and goal measurement; while Sample Group B also agrees with this statement but not to the same extent as Sample Group A. However, both Sample Groups agree equally that the Balanced Scorecard provides for regular goal achievement feedback.

Both Sample Groups agree that the Balanced Scorecard could possibly be further refined for the Southern African business environment. These refinements, according to the Sample Groups revolve around diversity management issues and the lack of practical examples of scorecard implementation in South Africa.

The Sample Groups' suggestions for why the Balanced Scorecard has become popular globally, as a performance management tool were: it provides synergy between corporate and SBU strategy; it can be used to measure both tangible and intangible business activities; it provides focus on core breakthrough activities; it is highly adaptable due to its multi-perspective approach and it links the vision, strategy and goals of the company.

The main reasons suggested by the Sample Groups for Balanced Scorecard failures were: lack of top management support; lack of consistency and follow up in scorecard management; poorly defined objective and measure linking; poor communication and planning in scorecard implementation.

Finally, when Sample Group A was asked what improvements could be made to SBU A's Balanced Scorecard, the majority requested further training in scorecard methodology. This willingness to learn further about the Balanced Scorecard reintegrates their acceptance and positive attitude towards it.

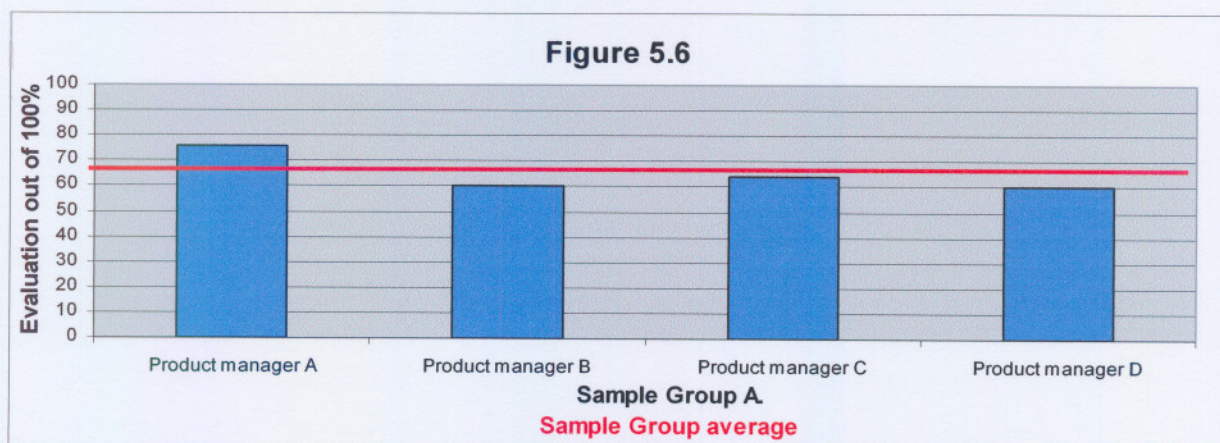
5.3 THEORY EXAMINATION RESULTS

The members of Sample Groups A and B were required to complete a theory examination based on the Balanced Scorecard, in order to determine if they had sufficient knowledge of the Balanced Scorecard to make it a contributing factor in SBU success. The question paper and mark sheet used in this examination were derived from Kaplan and Norton (1996:1-200). The Sample Group members were given one hour to complete the examination individually. The results of which are as follows, according to respective Sample Group.

5.3.1 Theory examination results: Sample Group A

All the members of Sample Group A were required to complete a theory examination of 25 marks in order to determine their level of theoretical knowledge on the Balanced Scorecard and its applications. The average achieved for the Sample Group was 65%. This indicates that Sample Group A has a reasonable theoretical understanding of the Balanced Scorecard and its applications. The examination results are indicated graphically in Figure 5.6, both individually and as an average.

Figure 5.6 Theory examination results of Sample Group A



5.3.2 Theory examination results: Sample Group B

All the members of Sample Group B were required to complete a theory examination of 25 marks in order to determine their level of theoretical knowledge on the Balanced Scorecard and its applications. The average achieved by Sample Group B was 41% represented graphically in Figure 5.7.

5.3.3 Comparison of Sample Group A and B theory examination results

As stated previously, both Sample Groups are familiar with Balanced Scorecard philosophy and the theory behind it, as performance management training courses are run at Maccauvlei by the product managers, where Balanced Scorecard methodology forms part of the course content.

Withstanding this, the examination results indicate that Sample Group A, which makes use of Balanced Scorecard methodology in SBU strategy and measurement, has developed a better theoretical knowledge of the Balanced Scorecard with an average of 65% achieved by the Sample Group. This possibly indicates that Sample Group A has a better understanding of the Balanced Scorecard through practical use of it. Consequently, Sample Group B only achieved an average of 41%, possibly due to lack of practical experience with the Scorecard, as their SBU does not make use of the Balanced Scorecard for strategy and measurement. It is significant that both Sample Groups achieved scores that correlated with their perceived understanding of the Balanced Scorecard, indicated by V4 and V8 in Section 1 of the questionnaire.

Figure 5.7 Theory examination results of Sample Group B:

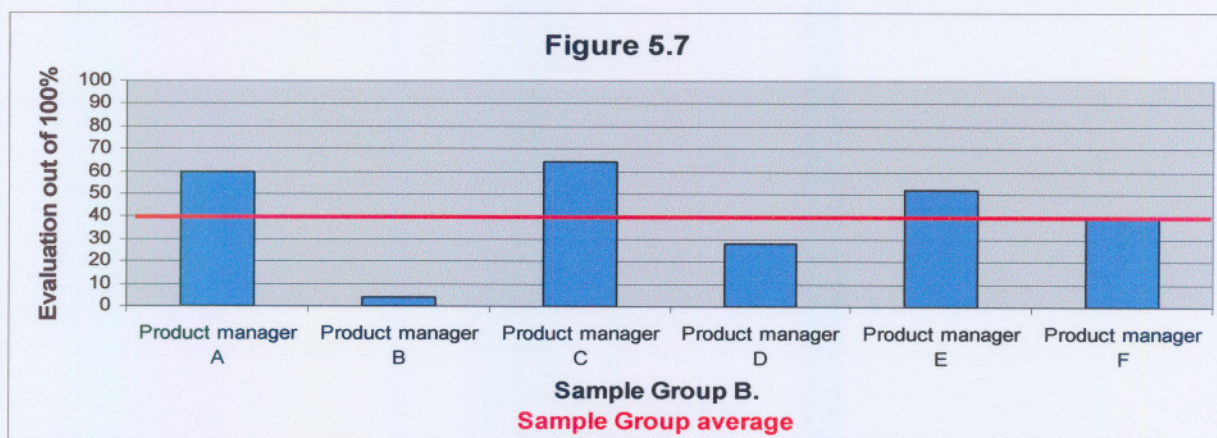
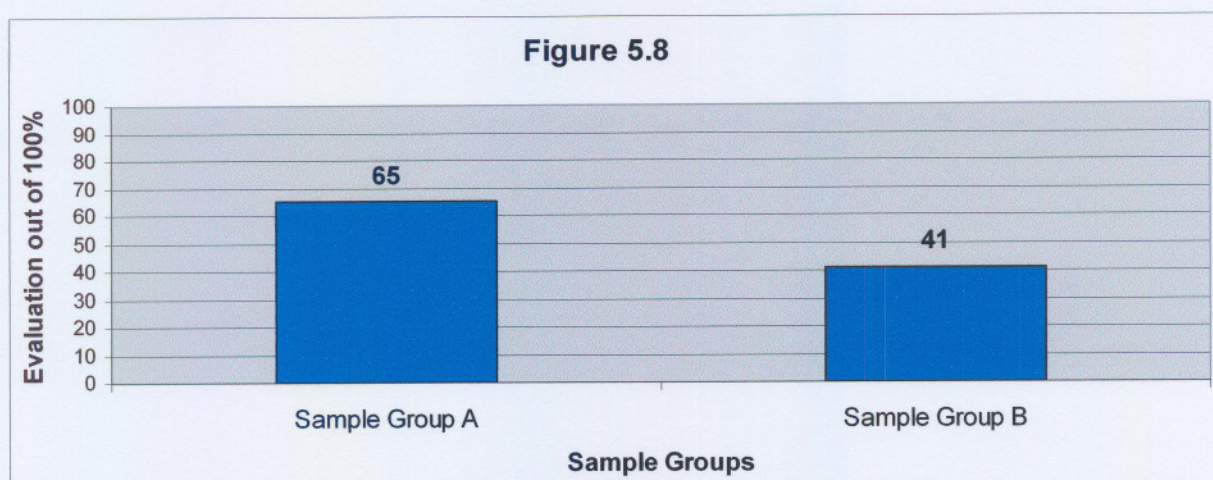


Figure 5.8 Sample Group A and B averages for the theory examination



5.4 STRUCTURED INDIVIDUAL INTERVIEW FINDINGS

The manager of SBU A was interviewed through a structured individual interview developed for the purpose of determining the benefits or business advantage derived in SBU A through Balanced Scorecard usage. The memorandum for the interview is featured in the annexes' section of this dissertation as Annexe D. For the purposes of validity the structured individual interview and informal information gathering interviews have all been recorded on to cassette tape. The interview took place at Maccauvlei training and conference centre on 25th of September 2004.

5.4.1 Summary of the structured individual interview

It was indicated in the interview that SBU A has had a Balanced Scorecard in place for the last 5 years (1999 to 2004). This scorecard had to be created from scratch owing to there being no Maccauvlei or corporate scorecard to base it on. SBU A's scorecard can hence be viewed as a pilot study for the rollout of a Maccauvlei scorecard. In the scorecard creation process, the manager of SBU A served as the architect and Kaplan and Norton's plan for scorecard implementation was followed except the time frame for implementation was shortened (Blackbeard, 2004).

According to the SBU A's manager the scorecard has been successful, as return on investment (ROI) for the Trainer Development SBU has exceeded its set corporate targets by more than 35%. Coupled with this, is the fact that SBU A's contribution to Maccauvlei's revenue has tripled in the period of Balanced Scorecard use (Blackbeard, 2004).

Finally, when asked if the four generic Balanced Scorecard perspectives by Kaplan and Norton (1992:71-79) were sufficient, it was indicated that SBU A deemed it necessary to have a fifth perspective: product innovation. The thought behind introducing this fifth perspective, revolved around product differentiation being considered essential to SBU A's success (Blackbeard, 2004).

The perception the interviewer obtained from the interviewee, during the structured individual interview, indicated that the Trainer Development SBU manager is satisfied with SBU A's Balanced Scorecard. SBU A's manager believes that the Balanced Scorecard provided significant business advantage to SBU A and helped to create the focus needed to seize the opportunities in the Training and Development sector.

5.5 FINANCIAL RESULTS REVIEW

The financial results review represents the quantitative part of this study and is designed to be used for the Trainer Development (SBU A) and Training and Development (SBU B) strategic business units for 2000 to the projected current year, 2005. The financial measures to be used are based on the core financial measures suggested by Kaplan and Norton (1996:306) to be generic in SBU scorecards, as measures of financial success namely:

1. Return on investment (ROI)
2. Revenue generated per annum (profitability)
3. Revenue growth per annum
4. Cost reduction productivity (efficiency)

These measures, including SBU revenue contribution to Maccauvlei as a whole, are consequently also the set determinants against which financial performance is

measured at Maccauvlei. Table 5.5 indicates the financial results for SBU A and SBU B. Revenue and cost is indicated in millions of rand while revenue growth and cost increase is indicated as a percentage. Finally, return on investment (ROI) is indicated as a ratio.

Table 5.5 Comparison table of SBU A and B financial results

	Actual 2000		Actual 2001		Actual 2002		Actual 2003		Actual 2004		Projected 2005	
	A	B	A	B	A	B	A	B	A	B	A	B
SBU												
Revenue	3.1	9.1	4.3	11.4	5.2	12.5	8,2	15.2	8,9	16.5	10.1	16.7
Revenue growth	-	-	38.7%	25.2%	20.9%	9.6%	57.7%	21.6%	8.5%	8.6%	13.4%	1.2%
Costs	1.7	7.6	1.9	8.9	2.2	10.2	5.1	12.8	5.3	14.9	5.8	15.1
Cost increase	-	-	11.8%	17.1%	15.8%	14.6%	131%	25.4%	3.9%	16%	9.4%	1.3%
Contribution	1.4	1.5	2.4	2.5	3.0	2.3	3.1	2.3	3.6	1.6	4.3	1.6
ROI Ratio	1.82 in 1	1.19 in 1	2.26 in 1	1.28 in 1	2.36 in 1	1.22 in 1	1.60 in 1	1.18 in 1	1.68 in 1	1.10 in 1	1.74 in 1	1.10 in 1

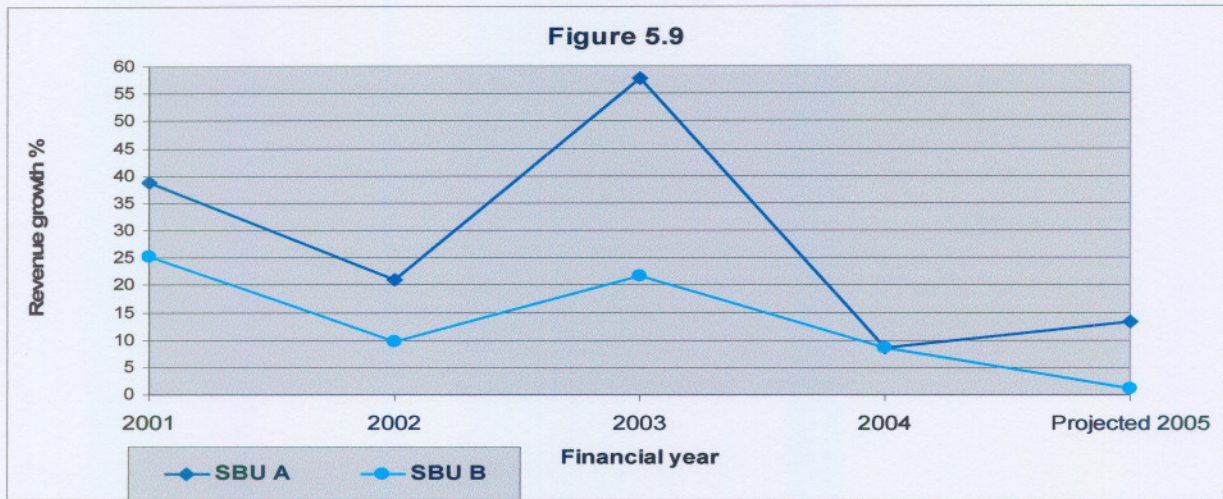
Source: Blackbeard and Hollenbach, (2004:10).

According to Morecroft, van Ackere and Vlahos (1997:130) financial data needs to be represented in an easily understood format. For this purpose graphical illustrations are a powerful communication medium, thus Table 5.4 will now be illustrated graphically. Taking into account that no single financial measure can provide a comprehensive view of financial performance, each figure will be compared and related to the others figures in the set (Morecroft, van Ackere and Vlahos, 1997:130). In the following figures SBU A is indicated by a dark blue line, SBU B by a turquoise line, revenue by a black line and cost by a red line.

Figure 5.9 illustrates the revenue growth of SBU A and B for the period of 2001 to the projected current year 2005. Both SBUs have inconsistent growth in revenue rates; this is a symptom of being in an industry that is in the latter growth phase seeking equilibrium. It is notable that when the growth peak occurred in 2003, SBU A was better equipped to take advantage of it. The SBU manager partly attributes this to the SBU Balanced Scorecard, as through it the opportunity was realised and capacity was increased - indicated by the sharp increase in revenue and cost on Figure 5.12 for 2003 (Blackbeard, 2004). It is notable that SBU B did not manage to take as much advantage of the industry growth phase in 2003, and could subsequently also not

recover as well as SBU A when the growth phase ended in 2004 to 2005.

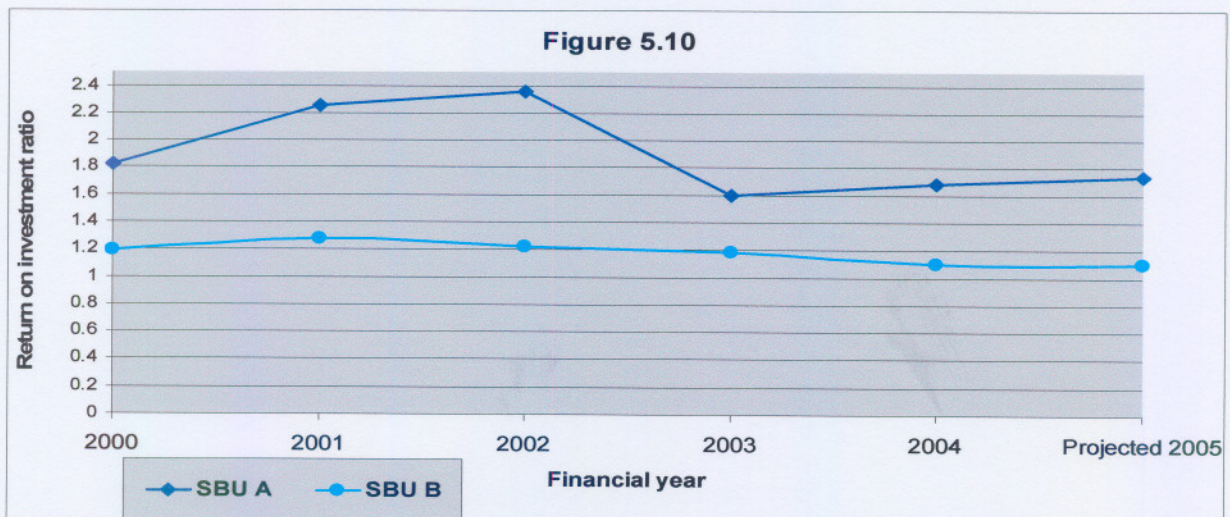
Figure 5.9 Revenue growth for SBU A and B



Source: Blackbeard and Hollenbach, (2004:11).

Figure 5.10 illustrates the return on investment ratio of SBU A and B for the period of 2000 to the projected current year 2005. The most notable point is that for the whole period SBU A has had a higher return of investment by an average 0,87c more on every 1 rand invested than SBU B. Secondly, Figure 5.10 corresponds to the revenue growth period illustrated in Figure 5.9 as a decline in ROI occurred when SBU A substantially increased capacity to take advantage of market growth.

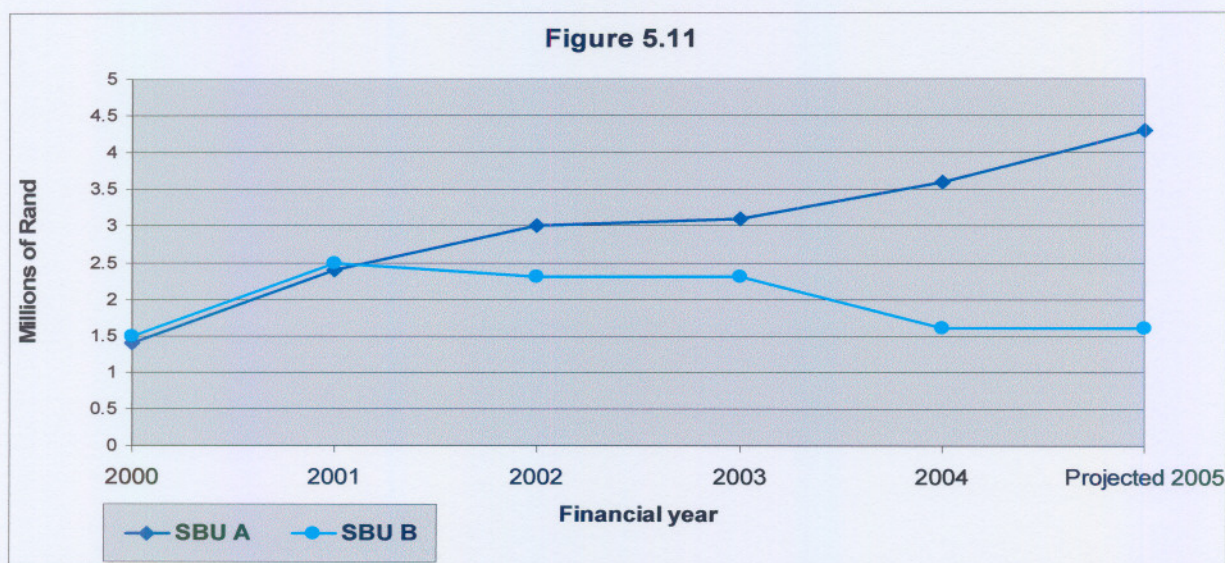
Figure 5.10 Return on investment ratio for SBU A and B



Source: Blackbeard and Hollenbach, (2004:13).

Figure 5.11 illustrates the total contribution of SBU A and B to Maccauvlei's revenue for the period of 2000 to the projected current year 2005. SBU A has contributed an increasing amount to Maccauvlei's revenue since 2001 and for 2005 it is projected to be twice that of SBU B. Whereas SBU B's contributory amount to Maccauvlei has stagnated and in fact reduced from 2003. This point is particularly relevant in light of the fact that SBU B has approximately twice the production capacity of SBU A.

Figure 5.11 Comparison between SBU A and B's contribution to Maccauvlei.



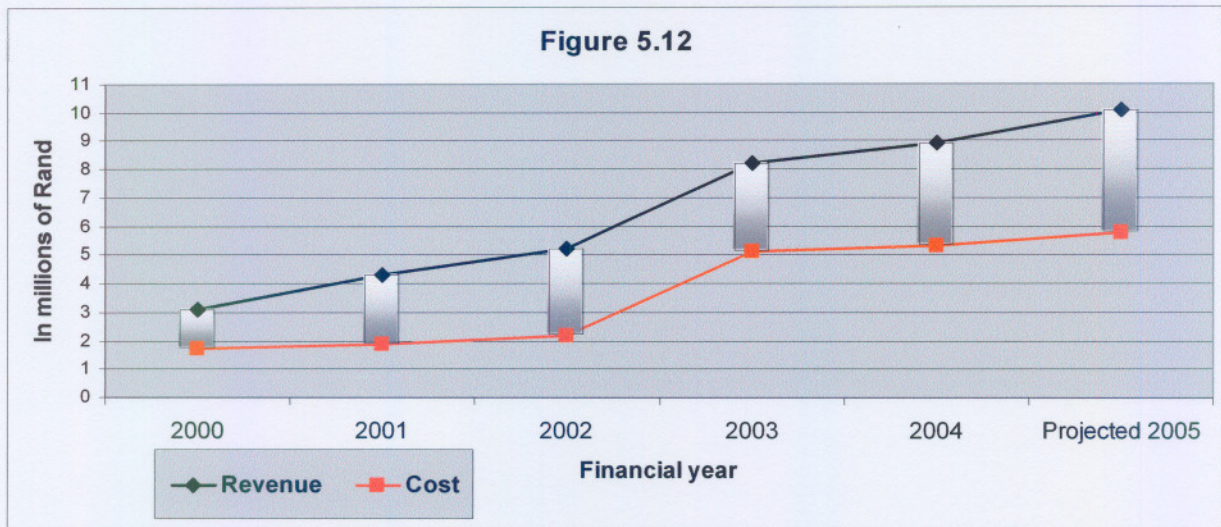
Source: Blackbeard and Hollenbach, (2004:16).

Illustrated in Figure 5.12 is the relationship between costs and revenue generation in SBU A for the period of this study. It is notable that the gap between revenue generated (black line) and costs (red line) has been incrementally increasing from 2000 to the projected current year 2005; indicating an increase in efficiency of generated revenue. This corresponds to Figure 5.11 where SBU A's contribution to Maccauvlei has steadily increased, in part due to reduced costs which can partly be attributed to the Balanced Scorecard refocusing SBU A on core value adding areas. (Blackbeard, 2004).

Illustrated in Figure 5.13 is the relationship between costs and revenue generation in SBU B for the period of this study. It is notable that the gap between revenue generated (black line) and costs (red line) has reduced from 2000 to the projected current year 2005, indicating an increase in operating costs. This corresponds to Figure

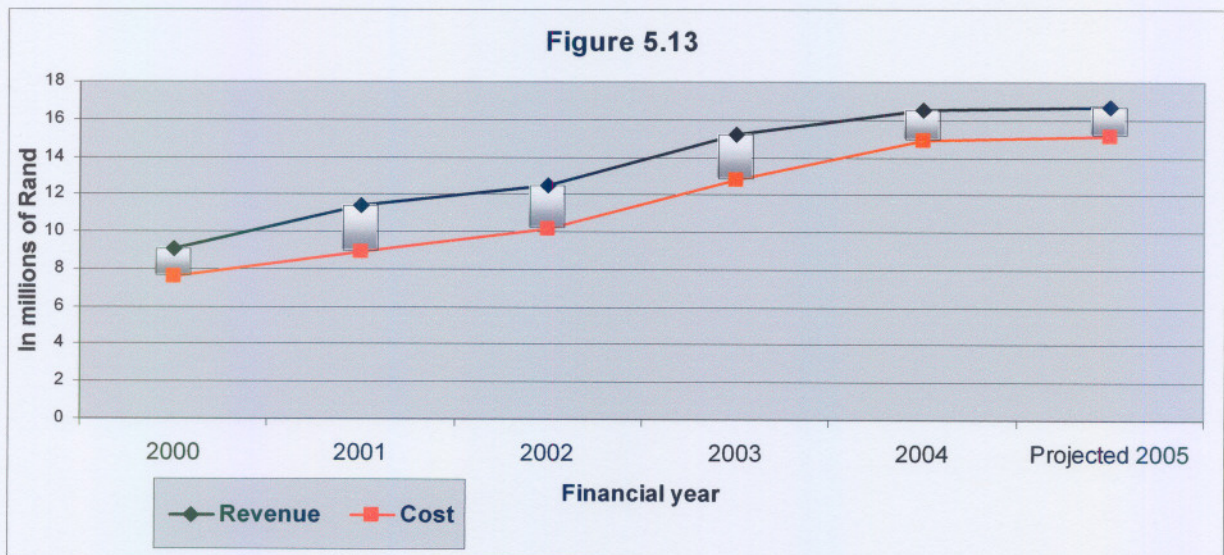
5.11 where SBU B's contribution to Maccauvei has greatly been reduced for this period. Thus a problem exists in SBU B's cost management, especially considering that SBU B has approximately twice the capacity of SBU A yet its overall contribution to Maccauvei is less than half that of SBU A's.

Figure 5.12 The revenue cost relationship in SBU A



Source: Blackbeard and Hollenbach, (2004:16).

Figure 5.13 The revenue cost relationship in SBU B



Source: Blackbeard and Hollenbach, (2004:17).

5.5.1 Derived conclusions from financial review

The following conclusions can be drawn from Table 5.4 and Figures 5.9 – 5.13. Firstly, SBU B is weakening financially; its return on investment has decreased from 28 cents in 1 Rand in 2001 to a projected 10 cents in 1 Rand for 2005. This, coupled with the fact that SBU B is approximately twice the size of SBU A and thus has approximately twice the production capacity, its contribution of R1.6 million to Maccaulei for 2004 is less than half that of the SBU A, which is R3.6 million. It is notable that SBU A's return on investment has been on average 86 cents per 1 Rand invested higher than that of SBU B for the period of this study. This means that the SBU A has increased its contribution to Maccaulei from 1.4 million rand in 2000 to a projected 4.3 million rand for 2005; which is approximately a 307% percent increase in contribution over 5 years. This period of success for SBU A correlates with what would be the most productive period of their Balanced Scorecard based on their implementation period of 5 years in relation to their customer turnover period (Schneiderman 1999,6). Therefore the conclusion can be drawn that a percentage of the financial success enjoyed by SBU A can be attributed to its scorecard. The Balanced Scorecard in SBU A can also partly explain how SBU A managed to profit out of this unpredictable yet lucrative late growth phase of the Training and Development sector, while SBU B only had moderate success.

5.6 SYNOPSIS

Both the Sample Groups indicated that they are in favour of Balanced Scorecards, shown by the majority of the questionnaire Section 1 dimensional modes being "Agreement" responses. It is notable that Sample Group A which makes use of the Balanced Scorecard in the day to day management of SBU A, had more dimensional modes in the "Agree" to "Strongly Agree" range than Sample Group B (SBU B), which does not have a Balanced Scorecard in place. This leads to the conclusion that the Sample Group that uses the Balanced Scorecard believes that it adds business advantage to their SBU.

The theory examination results indicate that Sample Group A has developed a better

theoretical knowledge of the Balanced Scorecard, possibly indicating that Sample Group A has a better understanding of the Balanced Scorecard through practical use of it. Sample Group B achieved a lower average, possibly due to lack of practical experience with the Balanced Scorecard. Consequently, Sample Group A - the Trainer Development (SBU A) product managers - are achieving better financial results, indicated by their higher revenue growth and return on investment. Owing to the similarities associated with SBU A and B, it is deemed logical to assume that at least part of the business advantage enjoyed by the Trainer Development SBU can be attributed to the Balanced Scorecard they have in place. This is again echoed by the Trainer Development (SBU A) manager in the structured interview, where his attitude towards the Balanced Scorecard and its merits are entirely positive.

An area of significance, highlighted by the questionnaire, is that of the potential for the Balanced Scorecard's structure to be further adapted to South African conditions; this was unanimously agreed to be feasible by the Sample Groups. The main areas indicated for adaptation were terminology and diversity management.

CHAPTER 6

SYNOPSIS, RECOMMENDATIONS AND CONCLUSION

6.1 INTRODUCTION

In this chapter the insight gained from the literature analysis in Chapter 2 and 3, as well as the results obtained from the research done in Chapter 4 and 5 will be combined. In order to conclude whether the Balanced Scorecard is firstly, a viable performance management tool and secondly, whether or not the Balanced Scorecard provided any significant business advantage to the Trainer Development strategic business unit (SBU). Recommendations derived from the above information will be formulated on how the Balanced Scorecard can be better utilised and how the Balanced Scorecard can be applied in a South African context.

6.2 SYNOPSIS

Performance tends to be improved at a far higher rate, almost ten fold, when a performance management system is used as opposed to trial and error (Paragraph 3.3.1.5). The core of a performance management system is measurement; as without proper measurement, progress reporting and accountability is lost. Measurement has in the past, relied solely on financial measures or accounting to measure performance. It is generally recognised that a more comprehensive system for performance measurement is needed that includes both tangible (financial) and intangible (non-financial) measures. This need is emphasised through the realisation that financial measures tend to report past performance and often do not indicate what is needed to be successful in the future. Non-financial measures however do tend to provide information on what future strategy should be. An example of this would be the measurement of customer satisfaction where one would identify what and how customer needs are evolving and thus be able to create a strategy whereby the company could satisfy these needs (Paragraph 2.2.1).

The Balanced Scorecard developed by Kaplan and Norton is widely recognised as being able to meet the above needs. It is defined as a multi-perspective performance management tool that uses four perspectives to measure performance. Where one perspective focuses on financial measures and the other three perspectives focus more on non-financial, or leading indicators, in order to determine how to achieve future financial goals. The most important benefit gained from constructing a Balanced Scorecard is a focussed future orientated strategy that aligns the company's resources in the same direction to achieve a common vision. In this light it can be viewed as both a performance management and a strategic management tool (Paragraph 2.2.1).

In this study the concept of the Balanced Scorecard was introduced; this is done through firstly defining the Balanced Scorecard and its potential benefits. The components of the Balanced Scorecard are then described in detail and examples are formulated from the Trainer Development SBU. The Trainer Development SBU forms part of Maccaulei, the training wing of the Anglo American Corporation and served as the focus group in this study, through providing examples and the information needed on the practical application of the Balanced Scorecard.

The primary components of the Balanced Scorecard were discussed, namely the company vision, mission, values and strategic perspectives. There are four generic strategic perspectives; the first being the financial perspective which focuses on traditional accounting measures like revenue growth. Secondly, there is the customer perspective where the focus is placed on how to become your customers' most valued supplier. Thirdly, the internal processes perspective; the focus here is on the processes both long and short term that the company needs to excel at to achieve financial and customer objectives, thus it is the management of the organisations value chain. The forth and final perspective, is the learning and growth perspective where the focus is placed on how the company can continue to improve and create value, particularly in regard to employee capabilities and motivation (Paragraph 2.3).

Throughout Chapter 2, the scorecard used by the Trainer Development SBU is discussed, providing practical examples of a working scorecard and the development of non-financial measures like the half-life method developed by Arthur Schneiderman (Paragraph 2.4). As a point of interest, the Trainer Development SBU's fifth perspective

the product innovation perspective was discussed and substantiated by Kaplan and Norton, indicating that the four generic perspectives should only be considered a template, as every scorecard implementation is different and the ability to tailor the Balanced Scorecard is one of its strengths (Paragraph 2.3.4.4).

Chapter 3 covers the building and implementation of a SBU's first Balanced Scorecard. Kaplan and Norton's Balanced Scorecard building and implementation plan was chosen for this as it is the same method that was used to create and implement the Trainer Development SBU scorecard and thus comparisons and examples could be drawn (Paragraph 3.2.1). The Balanced scorecard construction plan comprises of four steps namely: building the implementation plan, selecting and designing measures, building consensus around strategic objectives and defining the measurement architecture.

In the second half of Chapter 3, the possible reasons for a Balanced Scorecard's failure are discussed, as it is acknowledged that there have been many unsuccessful Balanced Scorecard implementations. The majority of these failures however can be attributed to a common set of mostly avoidable generic problems (Paragraph 3.3.1), which are:

1. The independent (i.e. non-financial) variables on the scorecard are incorrectly identified as the primary drivers of future stakeholder satisfaction.
2. The metrics are poorly defined.
3. Improvement goals are negotiated, rather than based on stakeholder requirements, fundamental process limits and improvement process capabilities.
4. There is no deployment system that breaks high level goals down to the sub-process level where actual improvement activities reside.
5. A state of the art improvement system is not used.

6. There is not and can not be a quantitative linkage between non-financial and expected financial results.

These scorecard pitfalls were analysed and substantiated; it was also indicated how the Trainer Development SBU overcame them (Paragraph 3.3).

In Chapter 4, the methodology for the research part of this study was reviewed. It was decided that this study should be undertaken as a comparison between two similar SBUs, where one makes use of the Balanced Scorecard and the other does not. The two SBUs chosen for this study both fall under the Maccaulei Training and Conference Centre and are both part of the ETDP SETA. The first being the Trainer Development SBU (Focus Group) and the second, the Training and Development SBU (Control Group). Consequently the Trainer Development SBU has had an implemented Balanced Scorecard in place for the last five years. The sample groups that completed the research instruments consisted of the product managers of each of the two SBUs used in this study.

For this study four instruments were chosen via an evaluation criteria matrix (Paragraph 4.2.4). This set of four instruments comprised of a Likert scale style questionnaire and a theory examination given to the product managers of the SBUs. A structured individual interview was given to the manager of the Trainer Development SBU and finally a financial results review for the years 2000 to 2005 was undertaken. These four instruments were used to create a four pillared body of evidence to substantiate that the reason for the Trainer Development SBU's superior performance was due in part to its Balanced Scorecard.

The logic behind undertaking such an in depth study, using four different instruments, relates in part to the nature of the Balanced Scorecard, being a management tool it is extremely difficult to ascertain its quantifiable value to a SBU. It was thus necessary to use a variety of qualitative and quantitative research instruments, in order that the complete set of research instruments could validate each other through disproving alternate theories that were not inline with the hypothesis to be proven.

In this study the hypothesis to be proven was that the Balanced Scorecard is a viable

performance management tool and provided the Trainer Development SBU with significant advantage over the Training and Development SBU at Maccauvlei. With the possible implications that the Balanced Scorecard would be viable in a wider setting like the training and development sector and South Africa as a whole. Through the research instruments it was possible to ascertain that the Trainer Development SBU manager believed in, and championed, the use of the Balanced in his SBU. This resulted in product managers that were motivated, willing and knowledgeable in its use, implying that the SBU scorecard was used in day to day operations. The financial review of the two SBUs in this study revealed that the Trainer Development SBU performed markedly better in the financial period when it had its SBU scorecard in place.

Thus there is a definite body of evidence to suggest that the Balanced Scorecard used by the Trainer Development SBU stimulated its success in the last five years and contributed to it being more successful than its sibling SBU. There is also evidence to indicate that a properly implemented Balanced Scorecard is an effective performance management tool, and promotes motivation among employees through clarity of goals and employee development. Further more this evidence can be tentatively viewed as an indicator that the Balanced Scorecard can be successfully implemented in the South African business environment, in particular by training and education practioners of the Education Training and Development Practices (ETDP) SETA.

6.3 RECOMMENDATIONS

6.3.1 Limitations of this study

With regard to the recommendations drawn from this study the following factors need to be taken into account. This research was undertaken as a dissertation of limited scope, meaning that the sample groups used for this research comprised of two SBUs - where one used the Balanced Scorecard and the other did not. Both SBUs are in the same company and industry, with relatively similar product offerings. This was seen as an *ideal opportunity to use the SBU without the scorecard as a control group in order to identify the benefits of the Balanced Scorecard in the focus group i.e. the SBU with the*

Balanced Scorecard in place. As far as experimentation goes within the business environment, this study offered a unique and rare opportunity to negate many interfering factors, however it is impossible to determine the effects of every internal and external factor on the research. Thus the results obtained need to be viewed as only an indicator of the value of the Balanced Scorecard in a wider setting like the Training and Development Sector and business in South Africa as a whole.

In this regard, there is evidence to suggest that at a later stage with future research the Balanced Scorecard structure and terminology can be further adapted to South African conditions.

6.3.2 The need for formalised performance management

It is widely acknowledged that global markets are becoming more competitive and the performance gap between successful and unsuccessful companies is diminishing (Paragraph 2.1). For South African companies this means that improvement through performance management has become essential to survival. As in the past, South Africa's isolation from global markets left South African companies lagging behind global competitors in many aspects, in particular performance management technology (Paragraph 1.2.2).

This means that South African companies have had to catch up to global performance management trends in the last decade in order to be competitive. Further more it has been advocated that if performance management is not undertaken as a formalised structured initiative and simply left up to trial and error, improvement in efficiency and effectiveness will only occur at a rate of one tenth of what it could be (Paragraph 3.3.1.5).

Consequently the Balanced Scorecard, originally developed by Kaplan and Norton in the early 1990's, has gained favour as tool to formalise and operationalise performance management through providing a framework that encompasses all a company's business activities into a set of critical performance measures across four business perspectives (Paragraph 1.1).

6.3.3 Cascading strategy down to operational level

Strategy formation is considered to be a major undertaking in any company as a company's strategy tends to determine its future viability and success (Paragraph 1.2.2). However, developing a strategy is often far easier than implementing it in the company down to the operational levels, where real value can be added (Paragraph 2.1).

It has been acknowledged that to link strategy with operations, a definite framework needs to be put in place, where strategic goals and objectives can be broken down (cascaded) through the levels of the company, into operational goals and objectives that still maintain the intent, direction and focus that the original strategic goals had. This concept is often described as organisational alignment since the whole company, top to bottom, is aligned in one direction to achieve a common vision (Paragraph 3.3.1.4). This scenario has the two-fold advantage of creating a focused goal directed company with vision achieving intent and secondly, creating a motivated workforce that understands their role in the bigger picture of the company (Paragraph 5.2.3).

The framework and structure provided by the Balanced Scorecard has proved to be particularly useful in achieving organisational alignment in the focus group of this study- the Trainer Development SBU. It was found that through the construction of their SBU scorecard, the process of developing key measures and objectives for the four strategic perspectives facilitated for the development of secondary and finally operational objectives and measures. In this way the whole SBU was aligned with a common set of objectives and could take full advantage of the opportunities identified in the strategic planning process (Paragraph 5.4.1).

6.3.4 Resistance to change

As a norm, people tend to be resistant to change in their working environment, especially in South Africa as the transition from a local economy to a global one has resulted in many companies having to re-structure and re-engineer themselves often resulting in retrenchments. This is especially true in the mining sector, where the majority of the Anglo American Corporation holdings in South Africa are placed, as the

Rand Dollar exchange rate seriously impacts revenue generated (Paragraph 3.2.4). This breeds mistrust in any change of strategy or company policy. To implement a Balanced Scorecard this mistrust first needs to be dealt with before any positive change can occur. To overcome resistance to change, an implementation plan needs to be put into place to reassure staff and smooth the way for the Balanced Scorecard rollout.

In the Trainer Development SBU this was accomplished by using a member of the executive, in this case the SBU manager to champion the Balanced Scorecard at the top level of the SBU (Paragraph 3.2.2). This was then supplemented by three distinct mechanisms (Paragraph 3.3.1.4) to ensure alignment and acceptance of the Balanced Scorecard throughout the SBU.

1. **Communication and Education Programs:** A pre-requisite for implementing strategy is that all employees, senior corporate executives and the board of directors understand the strategy and the required behaviour to achieve the strategic objectives. A consistent and continuing program to educate the organisation on the components of the strategy, as well as reinforcing this education with feedback on actual performance, is the foundation of organisational alignment.
2. **Goal-Setting Programmes:** Once the base level of understanding exists; individuals and teams, throughout the business unit, must translate the higher-level strategic objectives into personal and team objectives. The traditional management-by-objectives (MBO) programs used by most organisations should be linked to the objectives and measures articulated in the Balanced Scorecard.
3. **Reward System Linkage:** Alignment of the organisation toward the strategy must ultimately be motivated through the incentive and reward systems.

6.3.5 Motivation

One of the spin-offs of implementing a Balanced Scorecard is increased employee motivation, especially in the middle and lower corporate levels of a company. This

added benefit stems from the cascading of goals and objectives; since every employee, in theory, should know exactly what they need to achieve to contribute to the bigger picture of the company achieving its vision. This allows employees to see that they are making a difference in the company and thus are important to the company. This phenomenon also tends to foster a sense of pride in the company (Paragraph 5.2.3).

When reward incentives for goal achievement are added to the equation, employees gain a sense of control over their personal success and thus are motivated to take the company's best interests to heart (Paragraph 3.3.1.4).

6.3.6 The need to be future orientated

As globalisation continues and electronic commerce expands, it has become increasingly difficult to sustain an advantage and remain ahead of the competition (Paragraph 2.1). To survive managers need to take into account all the aspects that affect a company's success; this means that financial measures alone are no longer sufficient. Since financial results tend to report past performance they are not adequate predictors or drivers of future performance. Even current financial performance may be distorted by omitting the effects of current actions that have created or destroyed future value (Paragraph 2.2.2.2).

In contrast, non-financial indicators are usually lead indicators, as they inform managers of likely future performance. For example, the learning of new knowledge and skills is a lead indicator of management's future focus and ability to manage. Without investment in employees training and development, the company will be less able to cope with and manage change (Paragraph 2.2.1). Companies thus need to balance short term financial performance with long term growth opportunities (Paragraph 2.2.2.2).

The Balanced Scorecard can provide such a future-orientated approach through its three non-financial perspectives. The Customer perspective places the focus on determining what is required to satisfy the customer's current and future needs (Paragraph 2.3.4.2). The Internal process perspective emphasises the need to excel at and improve organisational processes (Paragraph 2.3.4.3) and finally, the learning and

growth perspective facilitates the development of employees to meet the current and future needs of the company (Paragraph 2.3.4.4).

6.3.7 The strategic application of the Balanced Scorecard

Although dubbed a performance management tool, the process of building a Balanced Scorecard is strategic in nature. This is based on the premise that to develop the key objectives and performance driver measures at the top of the scorecard, strategic planning needs to be done in such a way that strategic plans are given quantifiable goals and divided into corresponding perspectives. The Balanced Scorecard could be viewed as a means to formalise and structure strategic planning (Paragraph 3.2.6.2).

It is further more advocated that the Balanced Scorecard has the potential to be the cornerstone of an organisation's management system since it aligns and supports the strategic processes, including (Paragraph 3.2.4):

- Clarifying and updating strategy.
- Communicate strategy throughout the organisation.
- Align departmental and personal goals to the strategy.
- Identify and align strategic objectives.
- Link strategic objectives to long term targets and annual budgets.
- Align strategic and operational reviews.
- Obtain feedback to learn and improve strategy.

The reason for which a company may choose to implement a Balanced Scorecard will most probably influence what the scorecard is used for. However, this study and the sample group results have indicated that the Balanced Scorecard is a dynamic management tool that has benefits beyond its original design (Paragraph 5.2.3).

6.3.8 Adaptability of the Balanced Scorecard

The Balanced Scorecard has been implemented in thousands of different companies world wide, under a host of different environmental conditions. One of the reasons for the acceptance that the Balanced Scorecard has enjoyed is its ability to be adapted to

a variety of different business conditions. The basic design of the Balanced Scorecard should therefore be considered a template on which alterations can be made to tailor it to a company's specific needs (Paragraph 2.3.4.5).

The Trainer Development SBU scorecard has evolved since it was first built through Kaplan and Norton's ten tasks; five years ago (Paragraph 3.2.6). The scorecard re-evaluation process has been streamlined as experience with the scorecard has grown. It was also deemed necessary to add a fifth perspective to the scorecard to facilitate the unique needs of the SBU with regard to being at the forefront of training and employee development technology (Paragraph 2.3.4.5). These adaptations have contributed substantially to the overall workability and success of the Trainer Development SBU scorecard. Further more the Trainer Development SBU product managers indicated that the Balanced Scorecard, as a performance management tool, is highly adaptable and could be refined to South African business conditions (Paragraph 5.2.1.8 and 5.2.2).

6.3.9 Long term commitment

The Balanced Scorecard should not be considered a quick solution to all of management's problems. Rather it should be viewed as a long term project spanning at least five years that aims at building and sustaining long term growth (Paragraph 4.3.1). Implementing and managing a Balanced Scorecard requires a great deal of time and effort, and the decision to undertake one should not be taken lightly, based simply on aesthetic appeal or because it is the latest management trend.

The Trainer Development SBU experienced and realised the time commitment required to see real benefits from their Balanced Scorecard. Indicated by the product managers of the Trainer Development SBU suggesting that it takes approximately two years for the benefits of an implemented Balanced Scorecard to be realised (Paragraph 5.2.3 and 5.2.1.4.).

6.4 CONCLUSION

The intention of this study was to contribute to the area of performance management. Performance management is defined as, a continuous performance improvement process, supported by an effective, streamlined developmentally-focused system which is aligned to the vision, values and key strategies of the organisation.

The Balanced Scorecard is regarded as a performance management tool, because of its ability to align the organisation with its vision and strategy. The Balanced Scorecard achieves this through a multi-perspective approach that uses both traditional financial measures and contemporary non-financial measures to drive performance in four generic causal linked perspectives. There is however a case for the Balanced Scorecard being considered a strategic management tool as well, since its construction facilitates the development of the strategic objectives needed to achieve the organisational vision.

The ability of the Balanced Scorecard to produce results has unquestionably been proven; considering that since its conception in the early 1990s it has grown in popularity to the extent, that it is estimated that half of Fortune 1000 companies make use of it. With regard to its application in South Africa, it is still relatively unknown; however there is evidence to suggest that this is changing rapidly.

Having had a Balanced Scorecard in place for the last five years makes the Trainer Development SBU of Maccauvlei, in South African terms, a pioneer of new management technology. All the research instruments used in this study confirm the conclusion that the Balanced Scorecard contributed to the success this SBU has enjoyed over its contemporary business unit for the past five years. Thus in this study, the Balanced Scorecard can be considered to have added real value to the Trainer Development SBU and has proved to be a viable performance management tool.

In a larger setting, the success enjoyed by the Trainer Development SBU could be viewed as an indicator that there is a case for the use Balanced Scorecard by providers in the Training and Development sector. This study could also be viewed as a pre-emptive indication that the Balanced Scorecard is highly adaptable and, that an

opportunity exists for Southern African companies to improve their performance management practices through its use.

ANNEXE A
RESEARCH QUESTIONNAIRE:

ANNEXE A

RESEARCH QUESTIONNAIRE:

The purpose of this research questionnaire is to help draw conclusions as to the effectiveness of the Balanced Scorecard approach in performance management and measurement, within strategic businesses units of the Education Training and Development Practices (ETDP) SETA.

In the collection of data the following guidelines will be adhered to:

- To treat all information obtained by means of the questionnaire in the strictest confidence.
- To use the information only for the purposes of this study and not for any other purpose what so ever.
- Not to mention any individual names or to phrase my research report in such a way that anybody who might read the report, will have any clue as to what information relates to which individual.

Please fill in your details, in the block provided below:

<u>First name:</u>	
<u>Surname:</u>	
<u>Position:</u>	
<u>Department</u> <u>/SBU:</u>	

Questionnaire

Please place an X in the relevant box per question and where required fill in the text blocks.

1. Is there a Balanced Scorecard in place for your SBU?

Yes	No	Undecided

2. Do you believe that a growth of 5% above inflation is possible within your SBU for this financial year?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

3. Do you believe the effort required in creating and implementing a Balanced Scorecard is substantiated by the potential for SBU growth?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

4. Are you familiar with the Balanced Scorecard and its basic philosophy?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

5. What do you believe the timeframe would be for positive improvement once the Balanced Scorecard is implemented within your SBU?

+/-5 years	+/-2 year	+/-1 year	+/-6 months	+/-1 month

6. Should the implementation and use of a Balanced Scorecard be seen as a long term project?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

7. Do you believe that a well implemented Balanced Scorecard serves as a motivational tool?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

8. Do you understand the change that a Balanced Scorecard would bring about to your job and SBU?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

9. If an implemented Balanced Scorecard were to fail, in your experience or observations, what would the most likely cause be?

10. In your opinion, what changes could be made to improve the current scorecard of your SBU? (Sample Group A only)

11. Do you know what your goals and objectives are for this financial year?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

12. Do you know against which set of measures/metrics these goal and objectives will be rated?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

13. Do you regularly get feedback on your progress in achieving your set goals and objectives?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

14. Do you feel that adequate and above average performance is rewarded?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

15. In your experience does the Balanced Scorecard promote team work and co-operation?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

16. Do you know what your SBU's vision is?

Yes	No	Undecided

17. Do you feel that you are rated on both your contribution to company revenue as well as your intangible contributions?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

18. Why do you think the Balanced Scorecard has become so popular as a performance management tool worldwide?

19. Can the Balanced Scorecard be implemented in any organisation?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

20.1 Could Balanced Scorecard design be further refined for South African conditions?

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

20.2 If so, what refinements would you suggest?

ANNEXE B
THEORY EXAMINATION

ANNEXE B

THEORY EXAMINATION

This theory examination is made up of questions that will help determine whether the basic theoretical knowledge of the Balanced Scorecard exists within the sample groups for the Balanced Scorecard to be a contributing factor towards SBU performance.

- The following questions refer to Kaplan and Norton's Balanced Scorecard
- Answers should be kept brief and to the point
- A maximum period of 1 hour is allocated to the completion of this examination
- This is a closed book examination and is to be completed individually

1. Why was the Balanced Scorecard created?

2. Name the four generic perspectives of the Balanced Scorecard?

1.
2.
3.
4.

3. Who is credited with creating the formalized Balanced Scorecard structure?

4. Is the Balanced Scorecard only a tool to increase the effectiveness of measurement of business activities or is it a whole new approach to developing business strategy? Please substantiate your answer.

5. Who should the architect of the Balanced Scorecard be (position held)?

6. Does the Balanced Scorecard promote a centralised or decentralised approach to company management?

7. Is the Balanced Scorecard a "quick fix" to all company problems? Please substantiate your answer.

8. Who in general is included in the formation of a Balanced Scorecard (management level)?

9. How is a quantifiable metric developed for an activity like customer satisfaction? Name a method/instrument:

10. Do Balanced Scorecard's and TQM (Total quality management) compliment each other? Please substantiate your answer:

ANNEXE C
MEMORANDUM OF THEORY EXAMINATION:

ANNEXE C

MEMORANDUM OF THEORY EXAMINATION:

This memorandum for the theory examination was derived from Kaplan and Norton's (1996:1-200) publication 'The Balanced Scorecard,' as this is the consolidation of the three Balanced Scorecard defining articles.

1. The Balanced Scorecard was created in order to link financial and non-financial critical activities, into a balanced set of measurements. That takes both into account, so that a companies activities can be rated according to importance, in order that resources are directed to the right activities. Which can be properly measured in terms of their effectiveness. (3)
2. The financial perspective - or how should the company appear to shareholders?
The customer perspective - how does the organisation appear to customers?
The internal perspective - what business processes must the organisation excel at?
The learning/growth perspective - how does the organisation sustain its ability to change and improve?(4)
3. Robert S. Kaplan a David P. Norton. (2)
4. More than just a measurement tool and whatever logical reason.(2)
5. A top executive with extensive knowledge of the Balanced Scorecard methodology and company/ divisional/ SBU running. They must have the power to cut through bureaucracy and gain the support of top management. (3)
6. Decentralised to a practical extent. (2)
7. No, undertaking a Balanced Scorecard is a long term project that if done properly should take approximately 16 weeks to develop and once in place depending on customer turnover, can take up to 5 years to generate its aim- which is sustained company growth. (2)

8. Top management, corporate executives, divisional management, middle management, relevant shareholders are all consulted. (3)
9. Any relevant methodology/instrument e.g. half-life method or questionnaires. (2)
10. TQM and the Balanced Scorecard do compliment each other, as well as any relevant reason: (2)

Total: **(25)**

ANNEXE D
MEMORANDUM OF STRUCTURED INDIVIDUAL INTERVIEW

ANNEXE D

MEMORANDUM OF STRUCTURED INDIVIDUAL INTERVIEW

Interviewee: G. Blackbeard; Trainer Development SBU manager

Interviewer: B.D. Blackbeard

Time: 14:30 – 15:15

Date: 25 September 2004

Venue: Maccauvlei training and conference centre

Evidence: Cassette recording in the author's possession

Q1. How long has the Trainer Development SBU been making use of Balanced Scorecard methodology?

A1. Approximately 5 years

Q2. To how low a corporate level should Balanced Scorecards be cascaded?

A2. To middle management level

Q3. Is there a corporate and divisional scorecard that the Trainer Development SBU scorecard is based on?

A3. There is no Scorecard as such for the Anglo American group or Maccauvlei, the Trainer Development SBU scorecard is thus seen as a pilot study for the rollout of a Maccauvlei scorecard

Q4. Who is the architect of the current Balanced Scorecard and why was it deemed necessary for that scorecard to be created?

A4. The architect is Trainer Development SBU manager and it was deemed necessary to create the Scorecard as a more balanced perspective was needed, as revenue is not the only determining factor of a successful company.

Q5. Has your current Balanced Scorecard been successful? What leads you to believe this?

A5. The Balanced Scorecard has been successful, as return on investment (ROI) for the Trainer Development SBU is exceeding set corporate targets by more than 35%

and SBU A's contribution to Maccauvlei's revenue has tripled in the period of Balanced Scorecard use.

Q6. What motivated you to choose the Balanced Scorecard as means to improve performance management?

A6. The Trainer Development SBU manager was motivated to implement the Balanced Scorecard after attending a course, where statistical proof was provided for why a multi-dimensional performance management approach is superior.

Q7. To what division of Anglo America does the Training and Development SBU belong?

A7. Anglo American Corporation head office

Q8. What changes do you think could be made to improve your current Balanced Scorecard?

A8. The SBU scorecard needs to be further cascaded down to the supervisory and co-ordination levels. Where middle management should be trained in the application and implementing of the Scorecard.

Q9. Did you find it necessary to follow all ten of the tasks Kaplan suggests in the formation of your first Balanced Scorecard?

A9. It was deemed necessary to follow all ten of Kaplan's suggested tasks in Scorecard formation.

Q10. After the implementation of your first scorecard was it possible to leave out some of the above mentioned tasks?

A10. As more experience was gained with the Balanced Scorecard the process for re-evaluation and adaptation becomes quicker and easier. Thus tasks can be left out.

Q11. How often do you re-evaluate and improve your scorecard?

A11. On an annual basis.

Q12. In your opinion is there a better system available than the Balanced Scorecard for measurement in performance management?

A12. None that the Trainer Development SBU manager is aware of.

Q13. Do you think the four perspectives of the Balanced Scorecard are sufficient?

A13. In most cases of first implementation four perspectives are sufficient, but as experience grows in using the Balanced Scorecard, it can be adapted to better suit SBU needs. In the Trainer Development SBU a product development and innovation perspective has been created.

Q14. Has the implementation of the Balanced Scorecard brought any ethical concerns into focus?

A14. None that would not occur in normal business management.

Q15. How do you think the Balanced Scorecard can be better adapted to South African conditions?

A15. The scorecard should be simplified, as complexity is the enemy of transparency, which in the South African environment and especially in human resources is a concern.

BIBLIOGRAPHY

ARVESON, P. 1999. Deployment of the Balanced Scorecard Measurement System. [WEB:] <http://www.balancedscorecard.org/appl/deployment.html>. [Date of access; 9 Feb. 2005].

ANTHES, G.H. 2003. Balanced Scorecard. *Computerworld*, 37(7):34, Feb.

BARNETT, V. 1991. Sample Survey principles and methods. London : Hodder publishing. 173 p.

BENDIX, S. 2001. Industrial relations in South Africa. 4th ed. Cape Town: Juta. 847 p.

BEINHOCKER, E. D & KAPLAN, S. 2003. The Real Value of Strategic Planning. *MIT Sloan Management Review*, 44(2):71-76, Winter.

BLACKBEARD, G. 1994. National Higher Certificate in Occupational Directed Education, Training and Development Practice program. Maccauilei. 8 p.

BLACKBEARD, G. 2004. Verbal communication with the author. Blackbeard. (Cassette recording in the possession of the author.)

BLACKBEARD, G. & HOLLENBACH, J. 2004. Maccauilei financial strategy review 2004. 23 p.

BLACKBEARD, G. HEFER, R. SCHOLTZ, E. RESSOUW, V. & VILJOEN, I. 2004. Trainer Development SBU strategic plan. 10 p.

BUTLER, A. LETZA, S. R. & NEALE, B. 1997. Linking the Balanced Scorecard to Strategy. *Long Range Planning*, 30(2):242-253.

- CHOW, C. W. HADDAD, K. M. & WILLIAMSON, J. E. 1997. Applying the Balanced Scorecard to small companies. *Management Accounting*, 79(2):21-27, Aug.
- CUMMINGS, J. 2004. Upfront: Questioning the Balanced Scorecard. [Web:] <http://www.businessfinancemag.com/magazine/archives/article.html?articleID=14341> [Date of access; 9 Feb. 2005].
- EPSTEIN, M. J. & MANZONI, J. 1997. The Balanced Scorecard and Tableau de Bord: Translating strategy into action. *Management Accounting*, 79(2):28-36, Aug.
- FONVIELLE, W. & CARR, L. P. 2001. Gaining strategic alignment: Making scorecards work. *Management Accounting Quarterly*, 3(1):4-14, Autumn.
- GERING, M. & MNTAMBO, V. 2001. Neither Balanced nor a Scorecard. *Productivity journal*, 20-21, Oct/Nov.
- GROJER, J. 2001. Intangibles and accounting classifications: In search of a classification strategy. *Accounting, Organizations and Society*, 26(7-8):695-713.
- HARRINGTON, H. J. 1986. Bullseye. New York : Brooks & Cole publishing company. 5 p.
- ITTNER, C. D. & LARCKER, D. F. 2003. Coming up short on non-financial performance measurement. *Harvard Business Review*, 81(11):88-95, Nov.
- JALBERT, T. & S. P. LANDRY. 2003. Which performance measurement is best for your company? *Management Accounting Quarterly*, 4(3):32-41, Spring.
- KAPLAN, R. S. 1990. Analog Devices, Inc.: The Half-Life System. Boston; Mass. : Harvard Business School Press. 9 p.
- KAPLAN, R. S. & NORTON, D. P. 1992. The Balanced Scorecard - Measures That Drive Performance. *Harvard Business Review*, 70(1):71-79, Jan-Feb.

KAPLAN, R. S. & NORTON, D. P. 1993. Putting the Balanced Scorecard to work. *Harvard Business Review*, 71(5):134-137, Sep-Oct.

KAPLAN, R. S. & NORTON, D. P. 1995. The Balanced Scorecard: Measuring corporate performance video guide. Boston, Mass. : Harvard business school productions. 1-8 p.

KAPLAN, R. S. & NORTON, D. P. 1996. The Balanced Scorecard: Translating strategy into action. Boston, Mass. : Harvard Business School Press. 311 p.

KAPLAN, R. S. & NORTON, D. P. 1997. Why does business need a balanced scorecard? *Journal of Cost Management*, 11(3):5-10, May/June.

KAPLAN, R. S. 1998. Innovation Action Research: Creating New Management Theory and Practice. *Journal of Management Accounting Research*, 10:89-118.

KAPLAN, R. S. & NORTON, D. P. 2001. The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment. Boston, Mass. : Harvard Business School Press. 400 p.

KAPLAN, R. S. & NORTON, D. P. 2004. Measuring the strategic readiness of intangible assets. *Harvard Business Review*, 82(2):52-63, Feb.

LEAHY, T. 2000. Tailoring the Balanced Scorecard. [Web:] <http://www.businessfinancemag.com/magazine/archives/article.html?articleID=13607> [Date of access; 9 Feb. 2005].

LIPE, M. & S. SALTERIO. 2000. The Balanced Scorecard: Judgmental effects of common and unique performance measures. *The Accounting Review*, 75(3):283-298, July.

MARTINSONS, M. DAVISON, R. & TSE, D. 1999. The Balanced Scorecard: A foundation for the strategic management of information systems. *Decision Support Systems*, 25:71-88.

McCANN, M. 2000. Turning vision into reality. *Management Accounting*, 78(1):36-37.

MCLEMORE, I. 1998. Managing Complexity. [Web:]
<http://www.businessfinancemag.com/magazine/archives/article.html?articleID=4668>
[Date of access; 9 Feb. 2005].

MCLEMORE, I. 1999. Putting the Scorecard to Work. [Web:]
<http://www.businessfinancemag.com/magazine/archives/article.html?articleID=5738>
[Date of access; 9 Feb. 2005].

MORECROFT, J. VAN ACKERE, A. & VLAHOS, K. 1997. Financial Times- Mastering Management. London : FT Pitman publishing, 130 p.

MOORE, D.S. 2000. The basic practice of statistic 2nd edition. New York : W.H. Freeman and company. 442 p.

NEWING, R. 1995. Wake up to the Balanced Scorecard. *Management Accounting*, London, 73(3):22-23, March.

OLVE, N. G. PETRI, C. J. ROY, J. & ROY, S. 2004. Twelve years later: Understanding and realizing the value of balanced scorecards. *Ivey Business Journal*, 1-7, May/June.

OLVE, N. G. ROY, J. WETTER, M. 1999. Performance drivers: a practical guide to using the Balanced Scorecard. New York : Wiley. 48-84 p.

PEARCE, J. A. & ROBINSON, R. B. 1994. Formulation, Implementation, and Control of Competitive Strategy. 5th edition. Homewood, Ill. : Irwin. 418 p.

RainbowNation.com. 2005. South African Rand vs US Dollar. [Web]
Dollar<http://www.rainbownation.com/business/randvsdollar.asp> [Date of access: 3rd March 2005]

RYAN, B. 2005. Undermining progress. [Web:]
<http://free.financialmail.co.za/05/0218/business/abus.htm> [Date of access: 3rd March 2005]

SALTERIO, S. & WEBB, A. 2003. The Balanced Scorecard- Rhetoric versus research: a properly implemented program can help articulate and communicate strategy. *CA magazine*, EBSCO publishing, 39-41, Aug.

SCHNETLER, J. STOKER, D. J. DIXON, B. J. HERBST, D. GELDENHUYS, E. 1989. *Survey methods and practice revised edition*. Pretoria: Opinion Survey Centre Human Sciences Research Council. 233 p.

SCHNEIDERMAN, A.M. 1996. Metrics for the Order Fulfilment Process: Parts I and II. *Journal of Cost Management*, 1, Summer/Fall.

SCHNEIDERMAN, A.M. 1999. Why Balanced Scorecard's fail. *Journal of strategic management performance*, 1-11, Jan.

SIEGLE, D. 2004. Research instrument design–Likert scale. [Web:]
<http://www.gifted.uconn.edu/siegle/research/Instrument%20Reliability%20and%20Validity/Likert.html> [Date of access: 24 Feb 2004.]

SMIT, P. J. & DE J CRONJE', G. I. 1997. *Management principles a contemporary edition for Africa*. 2nd ed. Cape Town : Juta. 519 p.

SMITH, B. J DELAHAYE, B. L. & GATES, P. 1986. *Some Observations on TNA*. American Society of Training and Development, Aug.

SOUTH AFRICA. 1995. *South African Qualifications Authority (SAQA) Act, No. 58 of 1995*. Pretoria: Government Printer.

SOUTH AFRICA. Department of labour. 1997. *Skills Development Bill, Notice No. 1296 of 1997*. Pretoria: Government Printer.

SOUTH AFRICA. 1998. Skills Development Act, No. 97 of 1998. Pretoria: Government Printer.

STIVERS, B. P. COVIN, T. J. HALL, N. G. & SMALT, S. W. 1998. How non-financial performance measures are used. *Management Accounting*, 44:46-49, February.

TOWLE, G. 2000. The Balanced Scorecard: Not Just Another Fad. *Executive Journal*, 40(1):12-15.

VAN HOEK, C. SCHONKEN, S. & WATT, D. 1998. Module 1: Building a performance culture. Maccaulei training and conference centre. 28 p.

VENKATRAMAN, G. & GERING, M. 2004. Twelve years later: Understanding and realizing the value of Balanced Scorecards. *Ivey Business Journal*, 68(5):1-7, May/June.

WILLYERD, K. A. 1997. Balancing your evaluation act. *Training*, 34(3):52-58, March.

ZIMMERMAN, J. 1997. Mastering management. London : F T pitman publishing. 678 p.