The effective use of the balanced scorecard to implement strategy

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ABSTRACT

The purpose of this study was to confirm some of the factors, which had been derived from a comprehensive literature review, which influenced the effective use of the Balanced Scorecard to implement strategy. The case study method, utilising mainly semi-structured interviews for data collection, was used to test the theory against the evidence that was gathered from the case site. The research confirmed or contradicted a range of factors that assisted or hindered the effective implementation of strategy when using the Balanced Scorecard, which had been identified through the literature review, and also gave some valuable insights into some additional factors that may impact on the effectiveness of the Balanced Scorecard as a tool for strategy implementation.

THE DECLARATION

I, Piérre Deon Kriek, declare that this research report is my own, unaided work. It is submitted in partial fulfilment of the requirements of the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Piérre Deon Kriek

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1. INTRODUCTION

1.1 History and background to the problem

Kaplan & Norton (1992, 1993, 1996a, 1996b, 2001) devised the Balanced Scorecard as a performance management and measurement system that would address some of the challenges posed by the knowledge based economy. It was specifically intended to assist an organisation in managing and exploiting its intangible assets to generate value for all stakeholders by measuring and managing the non-financial, so-called "leading", measures of success (Kaplan & Norton, 1992, 1993, 1996a, 1996b). The authors, however, realised in later years that the Balanced Scorecard was being used in practice to address a much more important and complex problem (Kaplan & Norton, 2001). It appeared that companies were using the Balanced Scorecard to implement strategy.

There was some evidence to suggest that many companies that had adopted the Balanced Scorecard were successfully implementing new strategies (Kaplan & Norton, 2001). This was due to the fact that these organisations were directing and focussing key management processes, such as planning and budgeting, resource allocation, reporting and management meetings, at the formulation and implementation of their strategy (Kaplan & Norton, 2001). Kaplan & Norton (2001, 2) stated that:

"But today's economy, where intangible assets have become the major sources of competitive advantage, calls for tools that describe knowledge based assets and the value creating strategies that these assets make possible. Lacking such tools, companies have encountered difficulties managing what they could not describe or measure"

The purpose of this study was to identify the factors that influenced the effective use of a Balanced Scorecard to communicate and control strategy. DaimlerChrysler South Africa (Pty) Ltd ("DCSA") implemented a Balanced Scorecard in the period between 1995 and 2000 and it has since become entrenched in its performance management and strategic review processes. It was considered valuable to gain an understanding of the factors and processes that helped or hindered the effective use of the Balanced Scorecard to implement strategy in that organisation.

1.2 <u>The research problem and sub-problems</u>

<u>The research problem</u> was to determine the factors that influenced the effective use of the Balanced Scorecard to implement strategy.

<u>The first sub-problem</u> was to determine the factors that assisted the effective use of the Balanced Scorecard to implement strategy.

<u>The second sub-problem</u> was to determine the factors that hindered the effective use of the Balanced Scorecard to implement strategy.

1.3 <u>Delimitation</u>

The purpose of the research was to attempt to find solutions to the research problem in the context of an organisation engaged in the manufacturing, distribution and marketing of motor vehicles in Southern Africa. The focus was on the use of a Balanced Scorecard in this narrowly defined environment and external validity can only be claimed to the extent that it can be argued or deducted, mainly based on the literature review, that the results of the research could be applied across other industries or types of organisations. As this was a case study, that made use of no standard instruments besides a draft questionnaire that was used as a guide for semi-structured interviews, it is per definition of limited relevance for the generation of statistical generalisations about the research problem (Yin, 1994).

The purpose of the research was not to attempt to find statistical evidence supporting the effectiveness of the Balanced Scorecard, but rather to generate tentative solutions to the specific research problem.

1.4 <u>Significance of the study</u>

The study has significance, as it adds to the existing body of knowledge in the area of the Balanced Scorecard and specifically its application as a tool to implement strategy. Kaplan & Norton (1996b) argued that the Balanced Scorecard was a complete and reliable strategic management tool, but some argued that there was limited objective evidence in support of this assertion (Malina & Selto, 2001).

The current study is also of particular value as it provided the opportunity for a case study and access to a case site that would not otherwise have been available for academic scrutiny. Case study research involving just one case can be justified where the case provides unusual access for academic research, for example access by a researcher to his or her firm, casting light on how the theory fits in with the "real world" (Perry, 2001).

It is furthermore of value to the organisation in which the study was conducted, as the study could assist the organisation in improving the use of a Balanced Scorecard system that has become central in the implementation of strategy.

1.5 Assumptions

The following assumptions were made in the conduct of this research:

- That the net revenue growth of DCSA is indicative that its strategy has been implemented effectively
- That all respondents answered the questions posed during the semi-structured interviews honestly and without being influenced by organisational pressure

2. <u>LITERATURE REVIEW</u>

2.1 <u>Introduction</u>

The Balanced Scorecard has since its inception been widely discussed in academic literature and has been implemented in many organisations around the world. The purpose of this literature review was to attempt to find tentative supporting evidence to the research problem and sub-problems as stated above. The literature was accordingly analysed to formulate a brief overview of the Balanced Scorecard, to review some of the statistical evidence supporting the use and effectiveness of the Balanced Scorecard, and to develop an understanding of the use of the Balanced Scorecard to implement strategy. An effective literature review creates a foundation for advancing knowledge, as it facilitates theory development, closes area where an abundance of research exists and reveals areas where there is still a need for research (Webster & Watson, 2002).

2.2 <u>The Balanced Scorecard</u>

2.2.1 Overview of the concept

Kaplan & Norton (1992, 1993, 1996a, 1996b) formulated the concept of the Balanced Scorecard in reaction to the growing realisation that existing financial accounting measures, such as return on investment and earnings per share, were no longer addressing the exacting demands made by the modern competitive environment. This move towards non-financial performance measurements was driven by theoretical models and normative arguments (Kaplan & Norton, 1996a), as well as by empirical research and the introduction of more quality management systems and initiatives (Frigo, 2002a; Malina & Selto, 2001).

According to Ernst & Young (1998, 2001) tangible assets and forecasted cash flows were no longer the exclusive or even primary source or indicator of the value of an organisation. It was rather the existence and ability to utilise intangible assets to create sustainable competitive advantage that had become the leading indicator of future success and accordingly an important element in determining the value of an organisation (Ernst & Young, 2001).

Organisations seemed to favour these non-financial measures of performance as they were perceived to be more closely linked to strategic initiatives, or because they assisted employees to focus on important issues such as customer satisfaction (Frigo, 2002a).

Non-financial measures that tracked the intangible component of the value of an organisation have grown in importance along with the declining contribution of tangible assets to the value of an organisation. The market values of the companies in the S&P 500 as at the end of 1998 were made up in almost equal shares by tangible and intangible assets (Ernst & Young (2001. Ernst & Young (2001) identified the following as some of the most important non-financial measures of corporate performance:

- Strategy execution
- Management credibility
- Quality of strategy
- Innovation
- Ability to attract talented people
- Market share
- Management experience
- Quality of executive compensation
- Quality of major processes
- Research leadership

They also identified the following as the least important measures:

- Compensation ratios
- Use of employee teams
- Process quality awards
- Social policies
- Published investor materials
- Quality of customer service organisation
- Quality of analyst guidance
- Quality of investor relations
- Number of customer complaints

Malina & Selto (2001) compiled a rather comprehensive overview of the research that had confirmed the link between non-financial and financial performance measurements, but it was interesting to note that they identified that studies documenting the performance effects of including non-financial measurements in compensations plans were less consistent. The true challenge was nevertheless identifying the measures that would have a meaningful impact on the success of the organisation (Schneier, Shaw & Beatty, 1991).

Kaplan and Norton (1996) argued that one should not abandon the financial measures, but that one should combine the traditional financial measures with appropriate operational and other non-financial measures that would drive future financial performance. Kaplan & Norton (1996b:10) defined the essence of the Balanced Scorecard as follows:

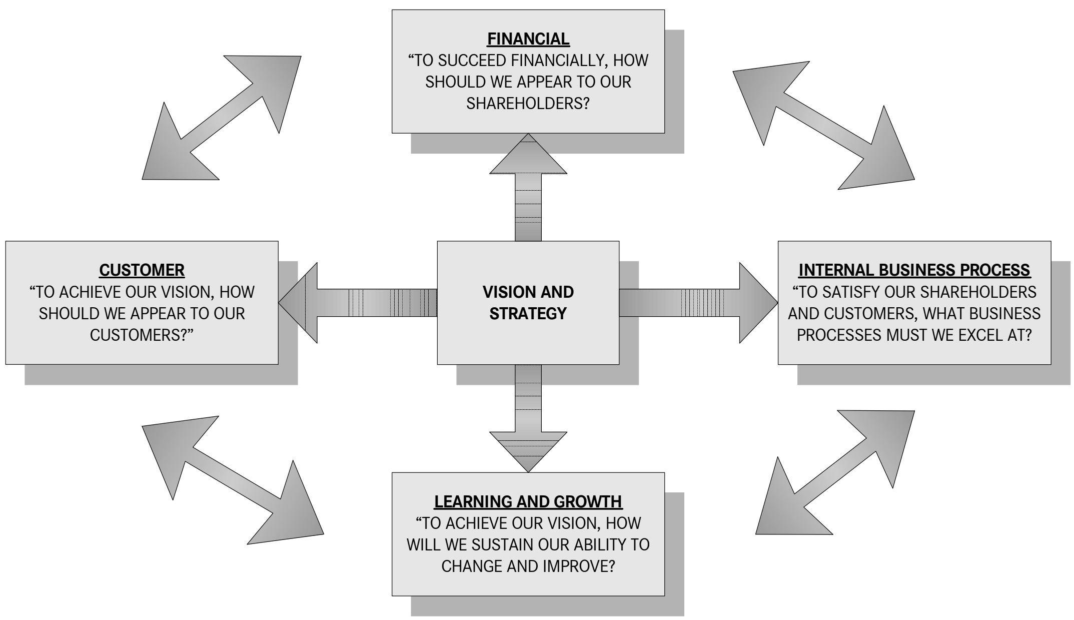
"The Balanced Scorecard should translate a business unit's mission and strategy into tangible objectives and measures. The measures represent a balance between external measures for shareholders and customers, and internal measures for critical business processes, innovation, and learning and growth. The measures are balanced between the outcome measures – the results from past efforts – and the measures that drive future performance. And the scorecard is balanced between objective, easily quantified outcome measures and subjective, somewhat judgmental, performance drivers of the outcome measures."

The authors initially intended the Balanced Scorecard to be implemented and used at the level of strategic business units to assist with the alignment of their strategies with the corporate strategy. Kaplan & Norton (1993), however, developed the concept of the Balanced Scorecard further by arguing that it was unique in that it was a top-down reflection of the company's strategy, it was forward looking and did not only focus on past financial performance, but also integrated external and internal measures and allowed managers to manage trade-offs and dependencies between measures, and finally it created focus in that agreement had to be reached on the most important measures as only these would be included in the Balanced Scorecard.

They identified a financial, customer, innovation and learning and internal business process perspective that would guide management in answering four fundamental questions (Kaplan & Norton, 1992, 1993, 1996a, 1996b):

- How do our customers see us?
- What must we excel at?
- Can we continue to improve and create value?
- How do we look to our shareholders?

Figure 1: The Balanced Scorecard provides a framework for translating strategy into operational terms:



Source: Kaplan & Norton (1996b)

The Balanced Scorecard has been criticised (and improvements proposed) for not taking into account the contribution made by employees and suppliers to the success of the organisation, not identifying the role of the community and not regarding the target setting process as a two-way process that also allowed the community to assess whether the organisation would be able to fulfil its obligations in the future (Barr, 1998).

According to Kaplan & Norton (1996b) the four perspectives of the Balanced Scorecard nevertheless allowed management to have a comprehensive overview of the business, without adding to the unnecessary and counterproductive proliferation of measures. The Balanced Scorecard allowed management to translate vision and strategy into measures across a balanced set of perspectives, and furthermore incorporated measures of the processes that would enable the company to deliver the desired outcomes (Kaplan & Norton, 1996b). It facilitated the interlinking of measures to assist management in understanding the cause and effect relationships between the performance drivers and company results (Johnston, Brignall & Fitzgerald, 2002).

Sharif (2002) argued that the Balanced Scorecard could be used as an operational control tool, a strategic planning tool, a management-reporting tool and also as a change management facilitation tool. Wongrassamee, Gardiner & Simmons (2003) compared the Balanced Scorecard to the European Foundation for Quality Management ("EFQM") model and found that although there were differences between the two approaches, they appeared to have been developed from the same principles. The EFQM model suggests that leadership should focus on people management, resources, policy and strategy, as well as processes (the so-called "enablers") to ensure customer satisfaction, people satisfaction and a positive impact on society, and that this would then also lead to superior business results (Armstrong & Baron, 1998). The EFQM model incorporates the financial, customer and internal business process perspectives of the Balanced Scorecard, but places less emphasis on strategic feedback and learning. The Balanced Scorecard creates the framework for strategy implementation, whereas the EFQM model rather defines the areas in which an organisation would have to build competencies to ensure that business results are improved and processes improved. Barr (1998) examined the potential of combining the Balanced Scorecard with excellence models such as that of the EFQM and concluded that this was both possible and beneficial. The synergy could lie in combining the strategy framework of the Balanced Scorecard with the comprehensive business excellence template of the EFQM model and ensuring that strategic focus is supplemented by the required efficiency in business processes and competencies.

Sharif also (2002) identified the linkages between value-based management, the Balanced Scorecard, benchmarking, as well as strategy formulation and implementation and argued that the Balanced Scorecard, benchmarking and value-based management were all ways of supporting and measuring the effective implementation of strategy. He stated that the measurement tools had to show the status quo, as well as the future intended status of the organisation, and that they had to facilitate discussion and communication of all relevant strategic perspectives in an iterative and evolutionary manner. Niven (2002) expressed the opinion that the Balanced Scorecard was a performance measurement system, a communication tool, as well as a strategic management system. The next section will explore the role of the Balanced Scorecard as a strategic management system.

2.2.2 The Balanced Scorecard and strategic management

Kaplan & Norton (1996b) expressed the opinion that the traditional financial measures, such as Return on Equity, Return on Net Assets and Economic Valued Added, told the story of past events and that this was probably sufficient for companies in the industrial age for which investments in long term capabilities and customer satisfaction were not critical for success. They nevertheless viewed such measures as inadequate in guiding companies in the information age to creating future value through investment in customers, suppliers, employees, processes, technology and innovation (Kaplan & Norton, 1996b). In their view the Balanced Scorecard not only incorporated non-financial measures into the performance management system, but also ensured that these measures were incorporated in the information system for employees at all levels (Kaplan & Norton, 1996b). The measures in the Balanced Scorecard were derived from the objectives that were driven by the mission and strategy of the companies (Kaplan & Norton, 1996b). The Balanced Scorecard effectively tells the story of strategy by clarifying and translating the vision and strategy, communicating and linking strategic objectives and measures, setting targets and aligning strategic initiatives, and enhancing strategic feedback and learning (Kaplan & Norton, 1996b).

Kaplan & Norton (1996b) expressed the view that the implementation of strategy started with educating and involving the people that had to execute the strategy, i.e. employees at all levels in the organisation. The organisations also had to involve the employees in suggesting the ways in which the vision and strategy could be achieved, as this would encourage the employees to be part of the formulation and implementation of strategy (Kaplan & Norton, 1996b). They argued that the Balanced Scorecard conveyed the “big picture” to all employees and showed how their individual action supported the achievement of the strategic objectives. The translation of the strategy into individual action required senior management to communicate and educate employees at all levels regarding the strategic objectives and to give feedback on actual performance (Kaplan & Norton, 1996b). It also required senior management to link the traditional management by objectives systems to the objectives and measures defined in the balanced Scorecard (Kaplan & Norton, 1996b). Finally, they argued that the alignment of the organisation to the strategic objectives had to be motivated through incentive compensation systems (Kaplan & Norton, 1996b).

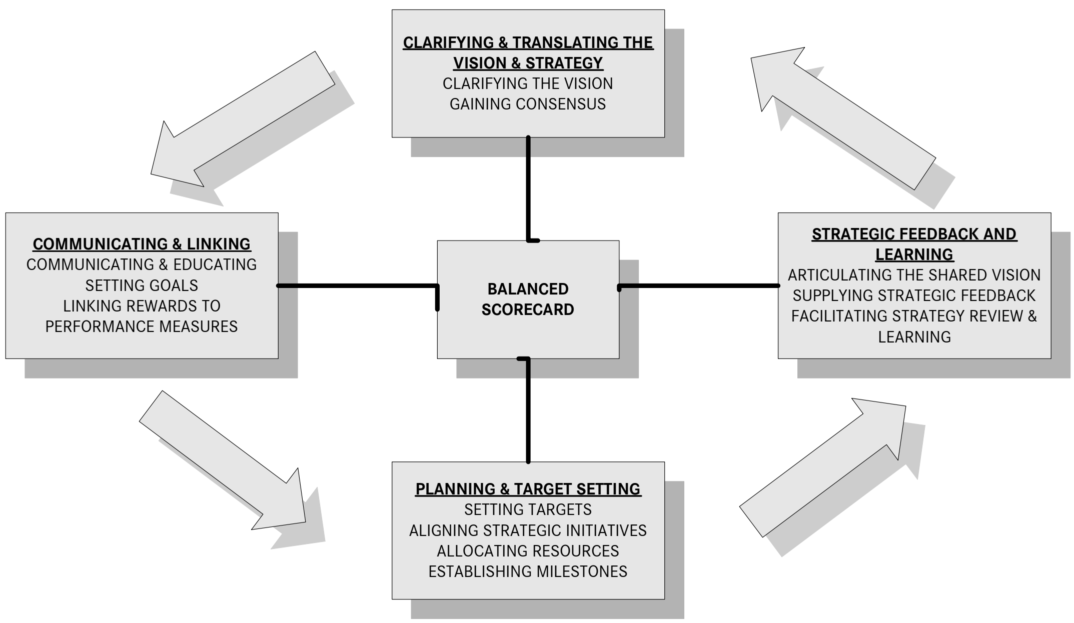
Figure 2: The phases of evolution in formal strategic planning

Source: Gluck, Kaufman & Walleck (1982)

Kaplan & Norton (1996a, 1996b) argued that the Balanced Scorecard utilised four processes to link short-term (operational) activities to long-term (strategic) objectives. The first process was translating the vision into clearly defined and measurable metrics. This was in essence quantifying the desired future in a manner that would support concrete targets (Zagotta & Robinson, 2002). The second was communicating these metrics down the organisation and then linking the targets to individual compensation and performance systems, ensuring that people at all levels of the organisation understood how their performance added to the achievement of the strategic aims and the ultimate success of the organisation. The third process was the integration of the strategic review and planning process with the budgeting process, ensuring that company resources were directed at those initiatives and activities that support the strategic direction of the company.

The fourth process was strategic feedback and review that enabled the company to assess its performance against the targets and furthermore to engage in what Argyris (1996) called "double-loop learning", i.e. the ability to reassess its view on the cause and effect relationships between the targets they had identified and their strategic aims. Whereas single-loop learning defined expectations (or so-called "governing variables"), measured achievement against these expectations and then defined corrective action as necessary, i.e. it addressed the issues superficially, double-loop learning redefined the expectations or governing variables to meet new situations that may be imposed by the competitive environment, i.e. it addressed the root cause of the issue (Armstrong & Baron, 1998). It was essential that the organisation engaged in strategic management, i.e. a virtuous cycle of evaluating the execution of strategy and reassessing the appropriateness of the strategy, as opposed to strategic planning that was somehow removed from the execution process and disregarded feedback regarding the implementation of the strategy (Zagotta & Robinson, 2002).

Figure 3: The Balanced Scorecard as a strategic framework for action



Source: Kaplan & Norton (1996b)

But what is strategy? Porter (1996: 75) expressed the following view:

“What is strategy? We can now complete the answer to this question. Strategy is creating fit among a company’s activities. The success of a strategy depends on doing many things well – not just a few – and integrating among them. If there is no fit among activities, there is no distinctive strategy and no sustainability.”

Porter’s view (1996) seems to be supported by research that has indicated that it was systems of non-financial performance measurements, and not individual measurements that served as indicators of future financial performance (Malina & Selto, 2001).

Barr (1998) rightfully argued that strategy had to be incorporated in the Balanced Scorecard if it was to make a valuable contribution to the success of the company and that Porter's view (1996) on strategy underpinned the value and essence of the Balanced Scorecard. The Balanced Scorecard could assist an organisation in making the strategic shifts that were required to respond to and anticipate the organisation's strengths and weaknesses as defined by the forces at play in an industry (Porter, 1997). Hamel & Prahalad (1993) also stressed the importance of blending and balancing resources to facilitate the effective execution of strategy and this once again emphasises the value of the Balanced Scorecard.

The Balanced Scorecard seems to be a good tool for strategic management within the framework created by Mintzberg (1987), as it records the organisation's "pattern" of past actions (i.e. its "realized strategy") and the plan that would produce the "pattern" of actions in the future. It accordingly allowed the organisation to communicate its deliberate strategy and to record its "emergent strategy" and to learn from it.

Kaplan & Norton (2001) stated that an organization needed to do more than just ensure that the strategies of individual business units were effectively implemented. To ensure effective implementation of the corporate strategy, the organization had to link the strategies and the scorecards of the business units to create synergies through the integration of segregated and independent business units (Kaplan & Norton, 2001).

Goold, Campbell & Alexander (1995) argued that successful organizations created more value through "parenting advantage" than their rivals through aligning the capabilities of the corporate parent with the critical success factors of the individual business units. They identified different sources of this advantage and argued that it could come from managing and exploiting capabilities, operations, customers, technology, core competence, and external relationships between business units. Kaplan & Norton (1996b, 2001) also identified the sharing of common business processes and knowledge about critical technologies, the coordination of marketing efforts, and the sharing of production or distribution resources to exploit economies of scale (Dawar & Frost, 1999), as areas for potential parenting advantage. Kaplan & Norton (2001) argued that this type of strategy should be formulated and incorporated in a corporate level scorecard that could then be cascaded down to the individual business units.

Kaplan & Norton (2001: 165) stated that:

“Synergies arise from excellent interactions between business units, and these potential interactions need to be explicitly recognized in the strategies – and the scorecards – of the individual units”.

Kaplan & Norton (1996b) explored the topic of corporate level strategy and scorecard measures and the cascading of these strategies and scorecard measures down to strategic business units, and argued that the objective of the corporate level Balanced Scorecard was to determine how corporate level strategy could enable the strategic business units to be more valuable than the sum of its parts. They discussed the scenario where the strategic business units had disparate activities and objectives, but also where they had similar activities and objectives (Kaplan & Norton, 1996b). The corporate level strategy had to articulate why the strategic business units existed within the corporate structure, and not as independent entities. They noted that corporate scorecards are still in their early development stages, but that it had been used to clarify such elements of strategy as corporate themes and the corporate role. The corporate role included actions mandated at the corporate level that results in synergies between the strategic business units, for example by sharing common technologies, co-ordinating marketing efforts, centralising certain services that could be shared between the strategic business units and sharing production and distribution resources where economies of scale existed (Kaplan & Norton, 1996b). The synergies brought about by collaboration and the cascading of the corporate level strategy had to be explicitly identified, and had to be contained in the corporate level scorecard and then linked to the individual scorecards for the strategic business units (Kaplan & Norton, 1996b, 2001). Using a corporate level Balanced Scorecard could arguably assist an organisation in allocating resources more effectively across business units to ensure that resources were optimally leveraged (Hamel & Prahalad, 1993). It could also assist in reducing the business unit focussed thinking and move the thinking towards a philosophy that stresses the core competence of the organisation that stretches over the artificial barriers between business units (Prahalad & Hamel, 1990). In view of the conclusions reached by Lipe & Salterio (2000), as well as Banker, Chang & Pizzini (2004), i.e. that only measures that are common between business units or individuals are taken into account when evaluating performance, it would, from a performance management perspective, also be important to have a corporate level Balanced Scorecard with measures that are consistent across subsidiaries.

A study by Ernst & Young (2000) of almost six hundred portfolio managers in the United Kingdom confirmed the results of an earlier study in the United States (Ernst & Young, 1998) that the most important non-financial measure of corporate performance was the effectiveness of the execution of corporate strategy, and that this was even more important than the quality of the corporate strategy. The Balanced Scorecard does not define a strategy for a company and can also not select the best measurements of any intended strategy (both are the responsibility of management), but the Balanced Scorecard does require management to focus on creating a strategy and defining how performance can be measured in accordance with the strategy (Gautreau & Kleiner, 2001). Kaplan & Norton (1996b) indicated that the Balanced Scorecard could be used with a fairly narrow objective of gaining clarification, consensus and focus on their strategy and to effectively communicate the strategy, but they were of the opinion that the real power of the Balanced Scorecard was in its ability to function as a management system that provided systematic feedback that enabled the implementation of strategy through various management processes.

2.2.3 The effective implementation of strategy using the Balanced Scorecard

According to Niven (2002) there are four significant barriers to the effective implementation of strategy. The first barrier is referred to as the "vision barrier" and relates to the fact that the majority of an organisation's employees do not understand the organisation's strategy. Niven (2002) argued that this situation may have been less than problematic in an economy where competitive advantage was achieved through the most effective use of physical assets and where employees constituted part of the "productive capacity" of the organisation, merely parts of greater machine. In the knowledge economy, he argued, competitive advantage was derived from intangible assets, i.e. know-how, relationships and cultures, and the carry over from the industrial era, i.e. internal systems based on command and control, was not geared to allow employees to exploit these intangible resources.

Niven (2002) argued that the first process that supported the establishment of a Balanced Scorecard, i.e. the translation of an often vague and nebulous strategy into meaningful measurements, forced management to define and describe the strategy in terms and targets that were intelligible and meaningful to all employees and that allowed them to focus their energy and efforts on achieving the strategy (Kaplan & Norton, 1996b). Certain surveys of organisations that used the Balanced Scorecard found that the Balanced Scorecard had improved the effectiveness of the performance management system in communicating strategy (Frigo, 2002a). Schneier, Shaw & Beatty (1991) nevertheless argued that most organisations were identifying the "wrong" measures and were not succeeding in identifying the few measures that would enable the success of individuals, teams and the organisations.

The second barrier is the so-called "people barrier" and concerns the motivational aspects surrounding strategy implementation, i.e. creating incentives that will motivate employees to engage in the types of behaviour that would support the effective implementation of the organisation's strategy. Kaplan & Norton (1996b) argued that if you could not measure something, you could not manage it and Armstrong & Baron (1998) echoed the sentiment that "what gets measured gets done". It was essential for effective performance management that individuals and teams knew and understood what was expected of them and that they felt that they were involved in defining these expectations (Armstrong & Baron, 1998). Measurement provided feedback on whether things were going well and created the foundation for building further success, and also allowed corrective action to be taken where things were not going according to plan (Armstrong & Baron, 1998).

According Armstrong & Baron (1998) performance is as much about doing the work, as about the results that are achieved. It accordingly includes both behaviour, as well as the results that flow from the behaviour, and the implication for organisations is that they should manage both the inputs (behaviour), as well as the outputs (results) of individuals and teams (Armstrong & Baron, 1998). A number of factors impact on performance (Armstrong & Baron, 1998):

- The skill, competence, motivation and commitment of the individual, i.e. personal factors
- The quality of encouragement and guidance provided by leaders, i.e. leadership factors
- The quality of support provided by colleagues, i.e. team factors
- The systems and facilities provided by the organisation, i.e. systems factors
- The internal and external environment and pressures, i.e. contextual factors

All of these factors should be considered and a holistic approach that pervades every aspect of the organisation is essential to ensure that performance management is effective and that individuals can contribute towards the success of the organisation (Armstrong & Baron, 1998).

In essence performance management sets out to create a shared understanding of what must be achieved, to develop the capacity of the people and organisation to achieve it and to provide the support and guidance to individuals and teams to continuously improve the performance (Armstrong & Baron, 1998). At the centre of the performance management system is the requirement that objectives should be clearly identified, linked to the purpose of the organisation and effectively communicated to employees that are motivated. The first step in the performance management sequence is to define the corporate mission and strategic goals, which then provide a point of alignment to the succeeding activities. The business and departmental goals then has to be aligned to the corporate mission and strategic goals, after which individual goal agreements should clearly quantify the objectives and accountabilities of individuals.

This is then followed by action that is directed by the goal agreement and is supplemented by development and support. The progress of individuals against their goal agreements should be continuously monitored and, where necessary, individuals should be developed to give them the competencies to successfully achieve their agreed objectives (Armstrong & Baron, 1998). Performance management is accordingly about identifying objectives and measures that support the strategy, ensuring that individual are accountable for the achievement of the objectives and that they have the required competencies and support, and finally that they are motivated to achieve the required level of performance.

Niven (2002) argued that although measurement and incentive based reward programmes had been around for quite some time, the issue was whether the targets that had been set had been appropriate. Were we measuring the right things? The problem very often was that what was measured was what was easy to measure and that very often what was measurable in a particular job was not meaningful and what was meaningful was not measurable (Armstrong & Baron, 1998). Ultimately, the definition of measures had to depend on what was important to the stakeholders, i.e. the customers and shareholders, and this ensured that employees could focus on value added work as they knew what was regarded as value adding (Armstrong & Barron, 1998).

Kaplan & Norton (1996b) viewed the combination of scorecard objectives to an incentive compensation scheme as an essential component for achieving the necessary cultural change and argued that it was not a question of whether the measures had to be linked to incentives, but rather when and how the connection had to be made. The effectiveness of pay for performance schemes has been the subject of intense debate in academic circles and some studies have even found a negative impact on certain organisational citizenship behaviours for particular categories of employees participating in pay for performance schemes (Deckop, Mangel & Cirka, 1999). Although most evaluations of such schemes had been based on questionnaire responses and testimonials, various studies have reported contradicting results (Luthans & Stajkovic, 1999). It nevertheless appeared from a review of such studies that the negative effects of such schemes occurred under specific and easily avoidable conditions, that the understanding of such schemes relied on traditional conditioning and that the positive effects of such schemes were easily attainable using the processes derived from behavioural theory (Luthans & Stajkovic, 1999).

According to Armstrong & Baron (1998) the effectiveness of contingency or discretionary pay systems demanded the following:

- A system for assessing performance or competence
- The assessment had to be based on good information and informed opinion
- The employee being assessed had to participate in the process of obtaining evidence to support or refute the assessment
- The employee had to know why and how the assessment was made
- The employee had to have the right to appeal against the assessment

The process of “communicating and linking” (Kaplan & Norton, 1996b) forced an organisation to cascade the objectives identified during the first process down the organisation. This meant that “a line of sight” was created that allowed employees at all levels to clearly see the linkage between their targets and the strategic objectives or imperatives of the organisation, as measures at each level supported the achievement of the measures at the next level (Niven, 2002). Armstrong & Baron (1998) argued that good objectives had to bring about change and that the several factors influenced the effectiveness of the objectives in influencing performance. They argued that good objectives were:

- Consistent with the values of the organisation and the objectives of the department and organisation
- Defined precisely and through the use of positive words
- Challenging and stimulated high standards of performance and progress

- Measurable against quantitative or qualitative performance measures
- Achievable within the capabilities of the individual
- Agreed between the manager and individual concerned
- Achievable within the defined time period
- Teamwork oriented, in addition to emphasising individual achievement

Kaplan & Norton (1996b) argued that to achieve the ambitious financial objectives that should be included in the Balanced Scorecard, management had to formulate stretch targets for their customer, learning and growth and internal business process objectives. Kaplan & Norton noted that (1996b: 14):

"These stretch targets can come from several sources…Benchmarking can be used to incorporate existing best practice and to verify that internally proposed targets will not keep the business unit trailing in strategic measures."

The value of using the Balanced Scorecard as a tool for internal benchmarking addresses the concern that is often raised regarding using benchmarking to set ambitious stretch targets i.e. that only isolated issues or measures are studied. Performance is only studied along one dimension and a programme is developed to achieve this performance, yet is does not guarantee achievement of the financial objectives (Kaplan & Norton 1996b). The Balanced Scorecard allowed management to gain acceptance for stretch targets by focussing on linkages between important measures, and does not just focus on performance in isolated measures (Kaplan & Norton, 1996b).

The benchmarks should, however, be selected with care as the incorporation of inappropriate benchmarks in the Balanced Scorecard could lead to tension and conflict between employees and the propagators of the Balanced Scorecard (Malina & Selto, 2001). Benchmarks that were appropriate for evaluation and useful for guidance should on the contrary lead to acceptance and favourable results (Malina & Selto, 2001).

Johnston *et al* (2002) found that many companies were reacting against the proliferation of performance measures and the time spent on populating the measurement systems, by striving for simplicity despite the complexity of their business. Management in these companies had adopted an approach of "good enough" measurement, as measurement was not the main focus, but rather the quality of the decisions that were made. Too much focus on measurements and the measurement process directed the attention of management away from the business of action and actual management.

The third barrier is the “resource barrier” and according to Niven (2002) existed due to the fact that most organisation’s had quite separate and unrelated budgeting and strategic planning systems, which resulted in a disconnect between the organisation’s strategy and the allocation of resources. He pointed out that regularly the allocation of human and financial resources were based on the achievement or promise of short term financial targets rather than long term strategic targets, creating an inability to implement the grand plans compiled by the strategic planners. “Business planning” as envisaged by Kaplan and Norton (1996) involves identifying activities and action plans that will support the achievement of the strategic objectives, and the allocating resources during the budget planning process to support the activities.

Niven (2002) argued that this forced organisations to honestly evaluate competing initiatives and to make difficult decisions regarding the initiatives they should be supporting, and at the same time it afforded organisations the opportunity of critically examining the myriad initiatives that all ostensibly support the strategic vision. Only those initiatives that were aligned with the vision as articulated in the Balanced Scorecard should be allowed to continue, resulting in savings, but more importantly, signalling to the organisation the importance attached to the strategic vision (Niven, 2002). Proponents of the Balanced Scorecard argued that one of the principal reasons for its success was its ability to align investments in intangible assets to the company’s strategy (Kaplan & Norton, 2004b).

The fourth barrier is the “management barrier” and according to Niven (2002) is caused by management’s continuous focus on superficial and short term analysis of the non-achievement of targets which merely aims to ensure that the short term targets are achieved, instead of engaging in deeper analysis of the systems and processes and their effect on the creation or destruction of value. Niven (2002) argued that the process of feedback and learning allowed organisation’s to overcome the management barrier by allowing management to evaluate their hypothesis of business success as articulated by the Balanced Scorecard and the collection and combination of measures in the Balanced Scorecard.

Kaplan and Norton (1996b) argued that the Balanced Scorecard supported strategic learning in three ways: firstly it articulated a shared vision using a holistic model that linked individual targets to organisational objectives, secondly the Balanced scorecard supplied that feedback system that allowed management to test their assumptions regarding the results they aimed to achieve and the performance drivers that they identified, and thirdly the Balanced Scorecard allowed the periodic results review sessions to be converted to strategic review sessions where the assumptions underlying the strategy could be evaluated continuously.

In summary, Kaplan and Norton (1996b) argued that organisations were using the Balanced Scorecard to clarify and update strategy, to communicate strategy, to align business unit and individual goals with the strategy, to link strategic objectives to long term targets and annual budgets, to identify and align all strategic initiatives, and to learn about and improve the strategy.

2.2.4 The communication of strategy

Kaplan & Norton (1996a) argued that one of the ways in which the Balanced Scorecard supported the implementation and control of strategy was by assisting in effectively communicating the strategy. Malina & Selto (2001) argued that the ability to communicate strategy could in itself constitute competitive advantage, as an organisation's strategy could not be implemented in isolation from the organisation's human resources. A comprehensive review of the relevant literature in the area of organisational communication, lead Malina & Selto (2001) to identify certain characteristics of an effective organisational communication tool. They identified that the tool should:

- Convey valid messages, that were understandable, trustworthy, predictable, reliable, complete and resistant to manipulation or distortion
- Support the existing organisational culture or facilitate changing culture by reinforcing desired patterns of behaviour and confirming that individual or group reward is based on actual performance
- Promote knowledge sharing by serving as a communication tool for individual's knowledge and by collecting shared experiences, and by promoting dialogue and participation.

Malina & Selto (2001) argued that based on the relevant literature, a Balanced Scorecard that had the abovementioned attributes, would promote strategic alignment, positive motivation and positive organisational outcomes.

2.2.5 The management control of strategy

According to Malina & Selto (2001) research had indicated that an effective management control tool had to demonstrate the following characteristics to attain strategic alignment:

- A comprehensive (i.e. it should describe the organisation's strategy or hypothesis of success completely), but concise set of performance measures that were linked to the organisational strategy
- Performance measures that had a causal link to the preferred organisation outcomes
- Objective, verifiable and accurate performance measures that ensured that achievement

could not manipulated and that prevented actions that caused harm for the organisation from achieving good measured performance.

It has been found that a high level of subjectivity in defining or measuring targets included in the Balanced Scorecard could lead to disillusionment and the ultimate failure of the system (Ittner, Larcker & Meyer, 2003).

Furthermore, to promote positive motivation, the management control tool had to have the following attributes (Malina & Selto, 2001):

- Performance measures that reflected the actions that could in fact be controlled or influenced by managers
- Performance targets that were challenging, but attainable
- Performance measures that were linked to meaningful rewards or penalties that were not delayed, uncertain or ambiguous.

2.2.6 Culture and strategy implementation

Culture is the "system of shared meaning held by the members (of an organisation) that distinguishes it from other organisations" and comprises the following key characteristics (Robbins, 2001):

- Innovation and risk taking, i.e. the degree to which employee are encouraged to take risks and innovate
- Attention to detail, i.e. the degree to which employee are expected to exhibit precision and attention to detail
- Outcome orientation, i.e. the degree to which focus is placed on outcomes rather that the tools and techniques to accomplish these outcomes
- People orientation, i.e. the degree to which the impact on people influence decision-making
- Team orientation, i.e. the degree to which activities are performed by teams rather than individuals
- Aggressiveness, i.e. the degree of competitiveness

- Stability, i.e. the balance maintained between the status quo and change

The culture of an organisation can be a liability if it is not aligned with the strategic imperatives derived from an organisations strategy (Robbins, 2001). Schneier, Shaw & Beatty (1991) argued that different culture could lead to success, depending on the nature of the competitive environment, and that the performance management system had to fit in with the culture or had to assist in changing the culture.

<u>Figure 4: Performance cultures and performance measurement and management implications</u>

Performance culture	COMPETITIVE: UP-OR-OUT	SELECTIVITY: HIRE THE BEST, PUSH THEM, DEVELOP THEM	COMPETENCE: HIRE WELL, KEEP AS LONG AS CONTRIBUTING	ENTITLEMENT: HIRE ADEQUATE, RETAIN, REDEPLOY
Illustrative key practices related to managing people performance	Hire only those with high potential Cultivate an individual "star system" Tell people early if they'll make it; remove ones who won't Turnover encouraged Set extremely high expectations	Retain people as long as contribution is increasing Provide first rate development, not just training Cultivate teams, synergies Set high expectations, clear accountabilities Set high standards	Hire good people, potential unsure Provide opportunity to improve, develop Cultivate a "family"; avoid confrontations, dismissals Turnover avoided Performance standards vary in degree of rigour Provide "benefit of the doubt" in ratings	Move people to a job of best fit, given capability Promote co-operation, loyalty, security, "family" "Sugar coat" or do not offer performance feedback Provide continual training opportunities Routes to the top well known and inflexible Time an grade, not high performance, bring rewards
Competitive environment that enables companies with philosophy to win	Image and name of key people bring sales Highly competitive industry Dominating companies prevail Aggressiveness well rewarded financially	Synergies, innovations lead to sales Highly competitive, dynamic industry Leading companies have superior core competencies visible to customer	Leading companies have market dominance; slack resources Industry not highly volatile Slow growth, yet returns available over time	"Regulated" and/or "protected" industry Leading companies have a "franchise" that funnel sales to them Core technology is not quickly obsolete

Source: Schneier, Shaw & Beatty (1991)

2.2.7 Statistical and/or empirical support for the Balanced Scorecard

The Balanced Scorecard has been adopted in many countries and across various industries. In 1998 Silk (1998) estimated that approximately 60% of Fortune 1000 companies either had or were experimenting with the implementation of a Balanced Scorecard. Hepworth (1998) also reviewed the implementation of the Balanced Scorecard in the United Kingdom and found that, although it had been adopted in various industries, the successes of the Balanced Scorecard had not been documented to the extent it had been done in the United States. Rigby (2001) reported that a study of executives on various continents found that by 1999 approximately 44% of the firms participating in the survey were using the Balanced Scorecard.

Kaplan & Norton (1992, 1993, 1996a, 1996b, 2001) provided numerous examples and case studies of how the Balanced Scorecard had been implemented in practice and how it had assisted various companies to effectively implement strategy. The case studies included Rockwater, Apple Computer, Advanced Micro Devices, FMC Corporation, Xerox and Telco. The results of various independent studies also supported the effectiveness of the Balanced Scorecard as a performance management and measurement system that assisted in improving company performance. Sim & Koh (2001) conducted a study among 83 electronics companies in the United States and found that companies that had linked their strategic objectives to their performance measurement systems through the use of the Balanced Scorecard performed better than those that had not. Hepworth (1998) also provided an overview of the case studies and research that supported the notion that the Balanced Scorecard was an effective medium for implementing strategy and at the same time measuring performance.

Chia & Hoon (2000) provided an extensive overview of the literature supporting the use of the Balanced. Chan (2001) also found statistical support, based on non-parametric tests, for the effectiveness of the Balanced Scorecard. Hoque & James (2000) also found evidence to support the proposition that greater use of the Balanced Scorecard leads to improved performance.

Frigo (2002b) also reported that certain professional surveys by the Institute of Management Accounting had indicated that those managers that had adopted the Balanced Scorecard rated their performance management system much higher in the area of strategy communication and implementation.

2.2.8 Conclusions

It would appear that an organisation that wished to improve its strategy implementation had to identify the measures that counted, it had to measure these effectively, it had to hold people accountable for achieving the goals, it had to coach people to improve their performance and it had to reward people for their performance (Schneier, Shaw & Beatty, 1991).

The literature review indicates that the following factors influence the effective use of the Balanced Scorecard to implement strategy:

- Leadership, or the ability to gain the "hearts and minds" of the employees and relying on them to find innovative ways of doing things (Kaplan & Norton, 2001)
- Constructing Balanced Scorecards at a level on the organisation where a strategy exists and that requires alignment and integration (Kaplan & Norton, 2001)
- Having the right number of measures and not to few or too many (Kaplan & Norton, 2001)
- Process failures (Kaplan & Norton, 2001)

The literature (Malina & Selto, 2001) also indicates that the impact of the Balanced Scorecard will be positive if the following factors exist:

- Balanced Scorecard measures are measured effectively
- Balanced Scorecard measures are aligned with the strategy
- Balanced Scorecard measures are reliable guides for change or improvement
- The Balanced Scorecard constitutes a comprehensive measure of performance that supports strategy implementation
- Balanced Scorecard measures are seen to be causally linked to each other
- Achievement of Balanced Scorecard measures are linked to meaningful rewards
- Benchmarks in the Balanced Scorecard are appropriate and useful for guiding change

The problems encountered in designing and implementing the Balanced Scorecard are nevertheless probably quite similar to those experienced with other performance measurement systems and the following could have a negative impact on the effectiveness of the Balanced Scorecard (Malina & Selto, 2001):

- Measures that are inaccurate or too subjective
- One way communication regarding the content of the Balanced Scorecard
- Inappropriate benchmarks are used as the basis for evaluation

Kaplan & Norton (2001) argued that the success of the Balanced Scorecard depended less on structural factors and more on the leadership of the organisation who created the climate for change, the vision for change, and the processes that promoted communication, discussion and learning.

2.3 Research question

Robbins (2001) argued that there was no best way to manage people in organisations and that there was not a single set of rules that applied across all organisations and situations, but that it was contingent upon the existence or not of certain factors. He argued that as organisations were disparate in size, objectives and environments it would be surprising to find that certain principles applied universally. He argued that it was nevertheless useful for research in the area of organisational behaviour to focus on identifying exactly which factors were relevant for understanding organisational behaviour, i.e. identifying the relevant contingent variables in the existing theories and frameworks. This research attempted to identify some of the contingent variables that influenced the effective implementation of strategy using the Balanced Scorecard.

Research question: Which factors have helped or hindered the effective use of the Balanced Scorecard to implement strategy in DCSA?

The effective use of the Balanced Scorecard to implement strategy
The **literature review** indicated that the following factors influenced the effective use of the Balanced Scorecard to implement strategy: <u>In general</u>: • Leadership, or the ability to gain the "hearts and minds" of the employees and relying on them to find innovative ways of doing things (Kaplan & Norton, 2001) • Constructing Balanced Scorecards at a level in the organisation where a strategy existed and that required alignment and integration (Kaplan & Norton, 2001) • Having the right number of measures and not to few or too many (Kaplan & Norton, 2001) • Process failures (Kaplan & Norton, 2001) • Integration of the Balanced Scorecard process in the resource allocation process (Kaplan & Norton, 2001) <u>Positive impact would result from</u>: • Balanced Scorecard measures that were measured effectively (Malina & Selto, 2001) • Balanced Scorecard measures that were aligned with the strategy (Malina & Selto, 2001) • Balanced Scorecard measures that were reliable guides for change or improvement (Malina & Selto, 2001) • A Balanced Scorecard that constituted a comprehensive measure of performance that supported strategy implementation (Malina & Selto, 2001) • The use of Balanced Scorecard measures that were seen to be causally linked to each other (Malina & Selto, 2001) • The use of a system where the achievement of Balanced Scorecard measures were linked to meaningful rewards (Malina & Selto, 2001) • The incorporation of benchmarks in the Balanced Scorecard that were appropriate and useful for guiding change (Malina & Selto, 2001)

The effective use of the Balanced Scorecard to implement strategy
<u>Negative impact would result from</u>: • Measures that were inaccurate or too subjective (Malina & Selto, 2001) • One way communication regarding the content of the Balanced Scorecard (Malina & Selto, 2001) • Inappropriate benchmarks (Malina & Selto, 2001) • Having too many measures (Johnston *et al*, 2002) • The incorporation of measures that were not related to the strategy (Kaplan & Norton, 2001) • A measurement process that was too time consuming or onerous (Johnston *et al*, 2002)

3. RESEARCH METHODOLOGY

3.1 Nature of the research

A case study is a type of qualitative research that involves collecting in depth data relating to a particular phenomenon for the purpose of learning about a poorly understood situation (Leedy & Ormrod, 2001). Qualitative research focuses on phenomena in their natural settings and also attempts to capture the richness and multifaceted nature of a particular issue (Leedy & Ormrod, 2001). It is also fundamental to the qualitative research approach that there may be several perspectives that may all have equal validity or truth (Creswell, 1998) and that the researcher does not attempt to simplify what is observed (Leedy & Ormrod, 2001). Miles & Huberman (1994) stated that qualitative research normally involved normal, everyday life situations, which reflected the interaction between individuals and groups, also in organisations. They asserted that one of the main tasks of a qualitative researcher was to explain how people in particular circumstances understood and took action in everyday situations. The qualitative approach seems to be appropriate taking into account the open-ended and subjective nature of the research questions in this study. Qualitative researchers believe that they can get closer to the subject's perspective through detailed interviewing and observation (Falconer & MacKay, 1999).

In the context of qualitative research it is believed by some that there is not one single "truth" to be discovered, but that there may be many perspectives that may hold equal truth (Leedy & Ormrod, 2001). This explains the acceptance of the lack of objectivity in many qualitative research studies, where the researcher's ability to understand and interpret a real life situation, i.e. the subjective interpretation of the facts, becomes the research instrument that operates in areas where objective, quantitative methods would be undesirable or unworkable (Leedy & Ormrod, 2001).

Miles & Huberman (1994) stated that there was nevertheless a fairly consistent set of activities involved in qualitative research, and these will to some also extent be adopted in this study. These activities that characterise most qualitative research are the coding of notes from interviews or surveys, annotating remarks in the margins, sifting through the material to identify patterns and themes, using these to generate certain generalisations to explain the patterns and themes, and lastly confronting the generalisations with the existing body of knowledge. It appears that qualitative research is particularly appropriate where the purpose of the research is description of situations or processes, the interpretation of particular phenomenon, the verification of assumptions or theories, or the evaluation of the effectiveness of policies or practices (Leedy & Ormrod, 2001). The gaps in the theory are expressed as general, broad open research issues that guide the data collection and analysis (Yin, 1994).

Qualitative research was accordingly undertaken to attempt to address the research questions identified from the review of the relevant literature.

3.2 The case study method

The case study is regularly used to study a phenomenon in depth for a particular period and is appropriate for providing preliminary support for hypothesis (Leedy & Ormrod, 2001). The research problem in case study is normally a "how and why" problem, i.e. it fits into the realism or constructivist rather than the positivist paradigm (Perry, 2001). Case study research is appropriate for research on contemporary phenomena within its dynamic real life environment, utilising multiple sources of evidence, such as interviews and documents (Yin, 1994). Case research can have elements of theory building and theory testing and the views on the balance between the two ranges from the pure inductive to almost pure deductive (Perry, 2001). Prior theory nevertheless provides focus to the data collection and analysis process (Perry, 2001).

In a case study the data collected by researcher is in various forms and may include documents, records and interviews (Leedy & Ormrod, 2001). The data collected by the researcher includes information about the physical environment and other factors that have an impact on the particular situation and serves as the context against which the other data should be interpreted (Leedy & Ormrod, 2001). Data analysis in a case study involves organising the data collected in a logical order, clustering the data into meaningful groups, interpreting specific documents or observations, identifying particular patters in the data and the specific interpretations and finally reaching a conclusion and attempting to generate generalisations that may apply beyond the particular case (Leedy & Ormrod, 2001).

3.3 Case site

DCSA is a wholly owned subsidiary of DaimlerChrysler AG ("DCAG"), and operates as a motor vehicle manufacturer and distributor. DCSA has a broad product portfolio ranging from Mercedes-Benz, Chrysler/Jeep, SMART and Mitsubishi passenger cars, to Freightliner and Western Star medium and heavy commercial vehicles. DCSA manufactures the right hand drive Mercedes Benz C-class passenger car, for domestic and export markets, and the Mitsubishi Colt light commercial vehicle at its plant in East London. The other products in its range of passenger cars are all imported. The Sales and Marketing operation, as well as support functions such as Finance, Information Technology and Human Resources, are located in Zwartkop, Pretoria. The Board of Directors of DCSA consists mainly of members of senior management of DCAG and is responsible for approving and directing business strategy. The implementation of the approved business strategy is, however, delegated to the Board of Management consisting of a Chairman and Management Board Members who are empowered to ensure that the strategy is effectively implemented.

In addition to reporting, that is submitted through numerous systems and departmental and divisional reporting lines, the Board of Management reports to the Board of Directors at two annual Board of Director's meetings. The Chairman of the Board of Management reports to a member of senior management of DCAG who is also a Director of the local subsidiary. The other Management Board Members have dual reporting lines to the Chairman of the Management Board, as well as to a member of senior management in its German holding company. The performance of the Chairman and Management Board Members are assessed against target agreements that are determined and measured on an annual basis, and that are incorporated in the Balanced Scorecard. The Chairman's target agreement also serves as the target agreement of the company and ultimately determines the degree to which employees participate in sharing in the profits of the company through a contingent variable pay system.

DCSA implemented the Balanced Scorecard as part of an organisational change initiative approximately ten years ago and it has since become an important tool for strategy implementation and operational control. In its Zwartkop location the Balanced Scorecard is used as part of the monthly and annual review cycles, from departmental to Management Board level, and at its plant in East London it is also used on a daily basis.

All employees qualify for a performance bonus that is linked to a target agreement that is derived from the measures on the Balanced Scorecard. Employees at all levels have a bonus potential equal to a predefined percentage of annual base remuneration. The bonus potential is split between three components, i.e. the achievement of quantitative and qualitative objectives contained in an individual target agreement, the assessment of behaviour against a set of criteria for leadership behaviour (essentially a combination of critical incident technique and a behaviourally anchored rating scale, that is subjected to peer review for ratification), as well as a profit sharing component that is dependant on the performance of the company against the corporate target agreement. The degree of achievement of the target agreement and the assessment against the set of leadership criteria informs the definition of an overall performance category for each employee. Whereas the target agreement and leadership behaviour is incentivised through an annual performance based bonus, the overall performance category is the main determinant when annual salary increases are concerned. The company accordingly rewards for performance, as well as for competence, and also encourages collaboration and association with the corporate objectives through profit sharing.

The Balanced Scorecard has also become an essential element in strategy implementation, quality management and corporate governance in DCSA. DCSA was accordingly an excellent site to study the factors affecting the effective use of the Balanced Scorecard to implement strategy.

3.4 The research population and sample

The research population of this study consisted of all the members of management of the relevant organisation who have had sufficient experience in performance measurement and management and strategy formulation and implementation. The sample consisted of selected members from senior and junior management and specialist level that were involved in these areas. The interviewees were chosen to ensure that the typical perceptions and perspectives were revealed (Leedy & Ormrod, 2001), while at the same time ensuring representation across a spectrum of employee categories. Estimates of the required number of interviewees in a case study range from 10 to 60 (Perry, 2001). In this study 12 people were interviewed, as it was felt that they covered the majority of stakeholders. It also appeared from the results of the interviews that the issues identified in the literature review were comprehensively covered by these interviewees. Perry (2001) confirmed that the validity or meaningfulness of qualitative research is more dependent on the quality of the observations and analysis, than on the size of the research sample.

The following individuals were interviewed:

Level	Name	Position
Senior Management	F. van Olst	Management Board Member: Sales & Marketing
	S. Fischer	Divisional Manager: Market Performance Centre & Group Controlling
	S. Hayton	Divisional Manager: Mercedes-Benz Commercial Vehicles
	S. Gaede	Divisional Manager: Mitsubishi Motors Division
	L. Coetzee	Divisional Manager: Zwartkop Human Resources
	J. Steenekamp	Divisional Manager: Supply Chain Management
Junior Management & Specialists	G. Marnewick	Programme Manager
	S. Bissett	Specialist: Performance Management
	C. Ebersohn	Specialist: Organisational Design
	M. de Bruin	Balanced Scorecard & Performance Based Reward Controller
	C. Savage	Sales Planner: Commercial Vehicles
Consultants	J. Dudley	Board Support function

The careful selection of respondents from various levels in the organisation should contribute to the validity and reliability of the study (Story *et al*, 2001).

Miles & Huberman (1994) confirmed that the sampling in qualitative research was more often purposive, than random, firstly because the research population was normally more limited, and secondly because the logic and coherence of social phenomena may be destroyed by random sampling. The sampling will also tend towards conceptually driven sequential sampling in that initial panellist selection may lead to the selection of further panellists. The approach to sampling adopted in this study could be regarded as theory based sampling, as it attempted to find an example of Kaplan & Norton's theoretical construct to examine.

3.5 Data collection and analysis

Case study research normally uses multiple sources of evidence (Perry, 2001) and in this study a similar approach was adopted, drawing from data derived from documentation, archival records, interviews, direct observation and participant observation (Yin, 1994). To establish the validity and reliability of a case study, multiple sources of evidence should be used (enabling triangulation), a case study database should be created and the chain of evidence should be maintained from research problem to conclusions (Yin, 1994).

According to Leedy & Ormrod (2001) the interviews that are conducted as part of qualitative research are normally open-ended or semi-structured, revolving around a few central issues. Perry (2001) argues that interviews in case study research should be started with an open ended request o the respondent to simply "tell the story" relating to the research topic. This should then, if necessary, be followed by probing questions that will reveal the issues that did not come up in the unstructured part of the interview (Perry, 2001).

Interview data was collected through semi-structured interviews that were based on a set of questions that emanated from the research questions and literature review and that were used to generate some tentative conclusions regarding the research questions. Some of the interviews were with the written consent of the interviewees recorded, and for the others notes were made for review after the interview. The content of the interview schedule was derived from the literature review and the intention was to test the conclusions that had been based on the literature review in the context of the case study.

All respondents were assured of anonymity and participation in the study was voluntary. Interviews lasted between 25 and 60 minutes, with the duration depending on how much the interviewee had to contribute. The semi-structured nature of the interviews allowed the interviewees' contributions to add to or contradict the theory that had been formulated (Malina & Selto, 2001). The structure of the interview questions is contained in annexure B. The data was stored in various files and was initially organised chronologically before being analysed and categorised.

Data analysis in a case study begins as early as during the data collection phase and may influence the type of data collected during the latter stages of the study (Leedy & Ormrod, 2001). Data analysis in case study research normally involves a form of content analysis, i.e. the interview data is scanned and groups of words are assigned codes (Perry, 2001). The codes are normally derived from the literature review that preceded the data collection (Perry, 2001). The challenge is to review the data that has been collected and to dissect the data meaningfully whilst retaining the coherence of the data (Miles & Huberman, 1994).

The following are normally the steps involved in data analysis in a case study (Leedy & Ormrod, 2001):

- Organising the specific details of the case in some logical order
- Categorising or clustering data into meaningful groups, i.e. coding the content or first level coding (Miles & Huberman, 1994)
- Interpretation of specific documents or other data
- Identifying patterns that characterise the case (pattern coding)(Miles & Huberman, 1994)
- Synthesis and generalisations

In this case study use was also made of reflective remarks (Miles & Huberman, 1994). The conclusion of the case study involves testing the theory derived from the literature review against the results of the case study, i.e. analytic generalisation as opposed to statistical generalisation (Yin, 1994).

3.6 Validity and reliability

3.6.1 Validity

Validity in general is concerned with the accuracy, meaningfulness and credibility of a research project as a whole, as well as the extent to which it allows the researcher to draw meaningful and defensible conclusions from the research (Leedy & Ormrod, 2001). The research project needs to have sufficient controls to ensure that the conclusions drawn are in fact warranted ("internal validity" and "construct validity"), and it also has to be structured in such a way to ensure that the generalisations from the research can be applied beyond the boundaries of the particular research (so-called “external validity”) (Leedy & Ormrod, 2001).

Internal validity of a research study is the extent to which it allows the researcher to draw conclusions regarding cause and effect relationships from the data that has been collected (Leedy & Ormrod, 2001). The researcher has to avoid situations where the participants in a study change their behaviour or responses simply because they know that they are part of a study (known as “reactivity” or the “Hawthorne effect”), or where the participants have a certain expectancy of the results of their actions (known as “experimenter expectancy”) (Leedy & Ormrod, 2001). In case study research it is nevertheless extremely difficult to accurately identify cause and effect relationships and accordingly the identification of even causal tendencies are only studied in limited contexts (Perry, 2001). Construct validity requires that the research has suitable operational measures for the construct being studied (Perry, 2001). The external validity of a research study is the extent to which the results of the study can be generalised to other contexts (Leedy & Ormrod, 2001).

Researchers undertaking qualitative research studies also frequently employ strategies such as spending extensive time in the field, triangulation, “thick description” and feedback from other experts, to ensure that their findings are internally and externally relevant (Leedy & Ormrod, 2001). Triangulation involves the use several sources to gain an understanding of a phenomenon in an attempt to clarify the topic through convergence between evidence from different sources (Perry, 2001). Triangulation also helps to improve the construct validity of the research (Yin, 1994). Triangulation between the literature review, the results of the study and confirmation from the literature was also used to improve the validity of this study. The construct validity of the research was furthermore promoted by allowing flexibility in the initial stages of interviews to ensure that understanding of the construct was refined, and also by referring back to prior literature to ensure that the construct was accurate (Perry, 2001). External validity is promoted by studying a phenomenon in a real life setting, as it is more likely to yield results applicable in other real life contexts (Leedy & Ormrod, 2001). The careful selection of respondents in case research usually ensures that results are adequate for theory building or analytical generalisation (Perry, 2001). As mentioned earlier, the conclusion of the case study involves testing the theory derived from the literature review against the results of the case study, i.e. analytical generalisation as opposed to statistical generalisation (Yin, 1994).

3.6.2 Reliability

Reliability refers to the consistency of a technique in measuring a certain concept (Perry, 2001). There are several strategies that could be followed to promote the reliability of case research, such as standardising processes for data collection and the use of a steering committee to guide the conduct of the research (Perry, 2001). This research was however undertaken in a unique, dynamic and fast moving case context that is not readily accessible to other researchers. The emphasis of the study was accordingly not so much on the extent to which other researchers would be able to find convergent results in the same context, but rather on the validity of the research. The reliability of the study was nevertheless improved by providing a clear definition of the purpose of the study in an introductory communication (Story *et al*, 2001). The results of the study were also reviewed with other experts, including the proposed supervisor of the research, to counteract any bias that may have resulted from the researcher's interpretation of the exploratory data (Story *et al*, 2001).

4. THE CONTEXT OF THE CASE

4.1 Introduction

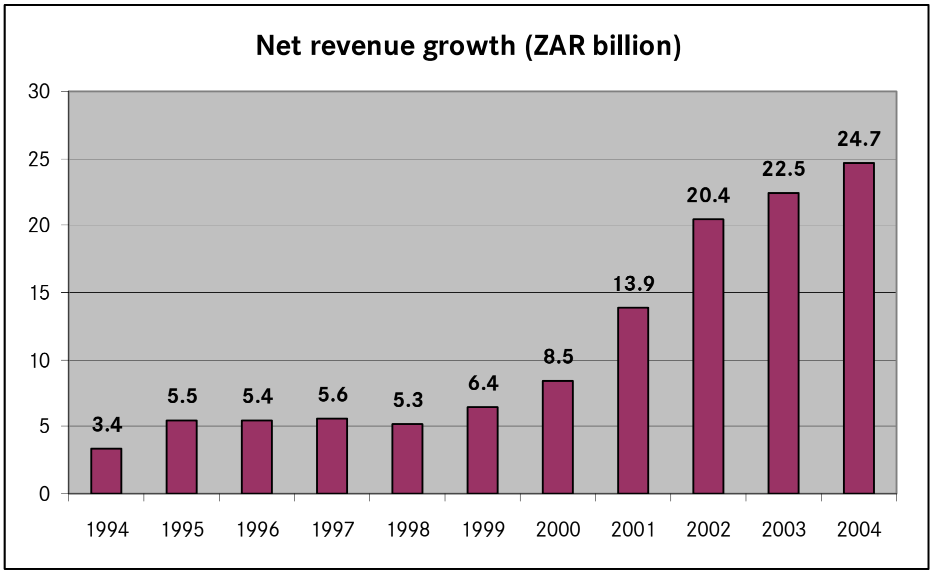
The purpose of this study to was to investigate, illuminate and attempt to describe the factors that have helped or hindered the use of the Balanced Scorecard to implement strategy at DCSA. The conclusion of the case study involves the testing of the theory that was derived from the literature review against the results of the case study in a process of analytic generalisation (Yin, 1994). To facilitate the process of triangulation, i.e. the convergence of evidence from the literature and the case study, the results of the data collection and the discussion or interpretation of these results has been combined into one section. Some observations and discussions have also been integrated into the discussion. This chapter gives some context to the case in the form of an overview of the case site, as well as history of the use of the Balanced Scorecard in DCSA.

4.2 DaimlerChrysler South Africa (Pty) Ltd

DCSA is a wholly owned subsidiary of DaimlerChrysler AG, and operates as a motor vehicle manufacturer and distributor. DCSA has a broad product portfolio ranging from Mercedes-Benz, Chrysler/Jeep, SMART and Mitsubishi passenger cars, to Freightliner and Western Star medium and heavy commercial vehicles. DCSA manufactures the right hand drive Mercedes Benz C-class passenger car, for domestic and export markets, and the Mitsubishi Colt light commercial vehicle at its plant in East London. The other products in its range of passenger cars are all imported. The Sales and Marketing operation, as well as support functions such as Finance, Information Technology and Human Resources, are located in Zwartkop, Pretoria.

The recent history of the company has been described as "tumultuous" with the creation of an integrated and highly sophisticated assembly plant, and the exploration of new market segments in the passenger car, as well as commercial vehicle markets (Schnetler, 2002). The last decade has also seen the integration of the East London assembly plant into the global manufacturing network and has been a period of tremendous growth for the company.

Figure 5: Net revenue growth at DCSA



Source: Schnetler, 2002 and DCSA documentation

4.3 The history of the Balanced Scorecard at DCSA

The Balanced Scorecard was implemented in DCSA as part of a reorganisation that was referred to as a "business process transformation". This transformation changed the structure of the company to a line of business structure that stretched across the sales and marketing and manufacturing functions. It appears that the Balanced Scorecard was introduced in attempt to achieve the benefits that Kaplan & Norton (1996b) had identified, mainly the introduction of three perspectives over and above the financial perspective that had been the main, if not only, focus of attention, but it was also in support of two other company specific objectives. The Balanced Scorecard firstly had to support the introduction of more transparency into the area of financial and management accounting information, which had been accessible only to a select few individuals. Secondly, it was intended to support the introduction of a bonus system that linked the payment of a variable bonus to the achievement of a selection of individual, team and company targets. Before the transformation project the company was apparently inwardly focussed and top management realised that it had to become more competitive and internationally focussed in order to secure its long-term survival in a market place that was increasingly open to international competition. The introduction of the Balanced Scorecard was part of this transformation process and work on this 'work package" commenced in 1995. The Balanced Scorecard had to assist the company in moving from a hybrid system of performance appraisal and management by objectives, to integrated performance management that would support the new strategic direction. DCSA had until then relied on a system that identified the objectives of individual employees in so-called "position profiles". Performance was then measured achievement against these individual objectives through a performance appraisal system that also allowed for a measure of self-assessment, and this process culminated in an overall performance rating. The assessment of performance against the objectives was supplemented with a range of competence ratings. The system was, however, flawed in that it suffered from the shortcomings inherent in many such performance appraisal systems, i.e. assessments of performance was very often subjective and arbitrary, ratings were not comparable between managers and managers had difficulty reconciling themselves with the tremendous power that was placed in their hands by this system (Armstrong & Baron, 1998).

The objectives for implementing the Balanced Scorecard in DCSA was accordingly also in support of the overarching goal identified by Kaplan & Norton (1996b) for the implementation of the Balanced Scorecard in most organisations that they studied, i.e. mobilising the organisation towards a new strategic direction. As in these organisations, it appears that the Balanced Scorecard developed beyond its initial purpose to become an integral part of the management system.

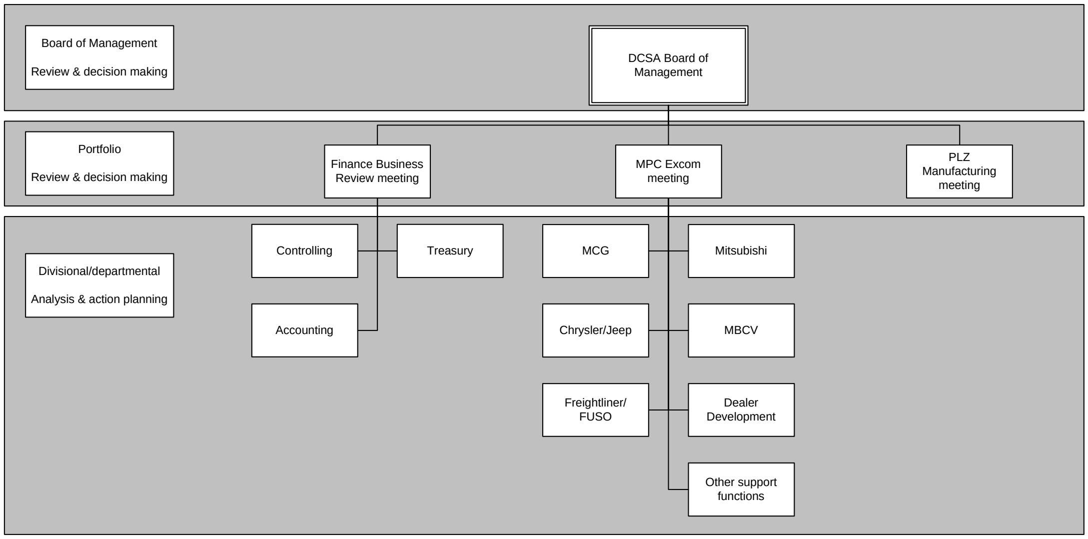
Although the Balanced Scorecard was not the backbone of the project, it was as important as the other packages such as logistics. At the time it was viewed by many as just another best practice tool, such as business process re-engineering or total quality management. By the middle of 1996 the project had moved from phase one to phase two and towards the end of 1996 project was in maintenance mode and ready to be handed over to the business. The line of business structure has since been replaced with a structure that is more appropriate since the integration of DCSA into the DCAG sales and manufacturing networks.

At the time of its introduction the Balanced Scorecard had a 5th perspective, a social responsibility element, in addition to the four perspectives identified by Kaplan & Norton (1996b). Nobody questioned whether it fitted the business and in the context of the reorganisation the Balanced Scorecard found the opportunity its broad acceptance, as well as its role as an instrument of change.

The software solution around which the Balanced Scorecard was built was a home grown solution. At that time there were few best practice examples and only a few of the members of the IBM consulting team had some experience of the processes underlying the Balanced Scorecard methodology. In 1995 the project team could not assume that people were computer literate and had to focus extensively on training people to ensure buy in and acceptance. It also meant that the project could not be implemented as a "big bang" and that it had to be introduced measure-by-measure and month-by-month. The comprehensive process of gaining consensus on the strategic objectives that were to be incorporated in the Balanced Scorecard was invaluable in itself, as it defined those things that were regarded by all as being essential for the achievement of the corporate vision. It effectively assisted in defining the corporate agenda (Kaplan & Norton, 1996b).

The Balanced Scorecard currently forms the backbone of the monthly process of reviewing the business results. Shortly after finalisation of the results, the Balanced Scorecard is populated with the relevant monthly and year to date data. The data is then discussed in departmental meetings, where root cause analysis is conducted in the event that any of the measures are red or amber according to the "traffic light" system. An appropriate action plan is then formulated and recorded on the Balanced Scorecard, together with a numerical outlook on the particular measure. Responsibility is assigned to an individual or a group of employees and a date for completion of the action plan is captured. The results are then discussed in the various divisional and then portfolio meetings where the action plans are discussed and amended or accepted. Further actions may also be agreed in these meetings and the results are again scrutinised for accuracy in preparation for the Board of Management meeting that is the culmination of the monthly review cycle. In the Board of Management meeting each Board Member has to present his results, as well as his action plans. After the Board of Management meeting, the decisions are fed back to the divisions through a decentralised process that utilises the minutes of the Board of Management meeting as a source to ensure consistency in content.

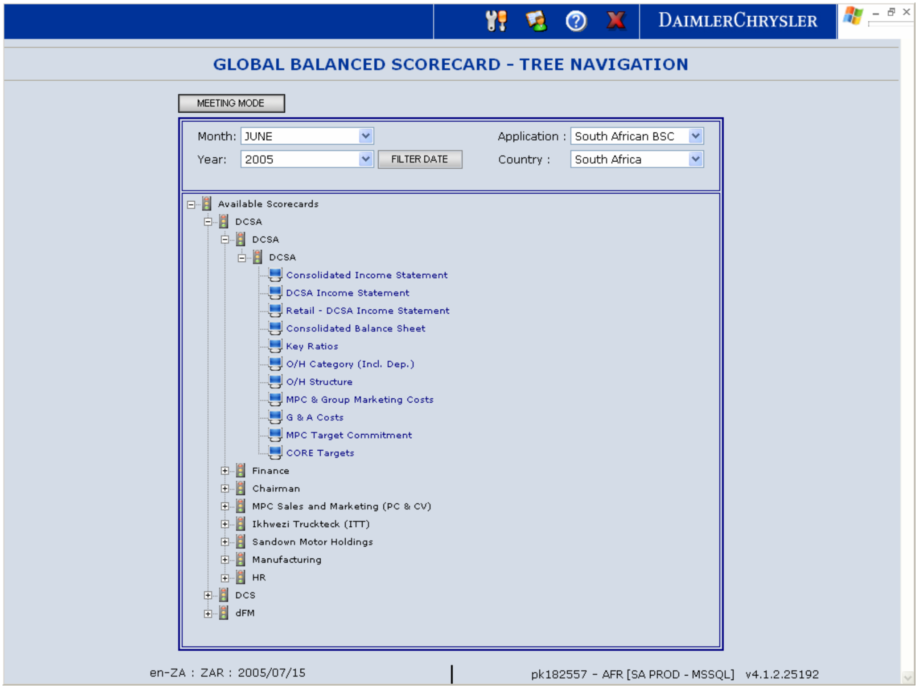
Figure 6: The structure of the monthly meetings at DCSA:



Source: DCSA Balanced Scorecard training material (2000)

The latest version of the Balanced Scorecard utilises a "tree diagram" navigation system that allows the user to select the required scorecard from a structure that replicates the organisational structure of the organisation. The top of the tree is the combined scorecard of the so-called DCX SA group of companies, i.e. the three local subsidiaries of DCAG that conduct their operations from the same premises in Zwartkop outside Pretoria. The next level of scorecards is for the individual results of the three companies. These company specific scorecards are then broken down into portfolio, divisional and even departmental scorecards. This means that the corporate strategic objectives are broken down into objectives, measures and targets down to the smallest business unit where the construction of a scorecard is still meaningful. This also allows employees down to the level of departmental managers to track the performance of their teams and the success of their initiatives against the targets.

Figure 7: The balanced scorecard navigation system:



The scorecard uses a "traffic light" system that indicates that status of a measure as green, i.e. on or ahead of plan, amber, i.e. behind plan by less than 2.5%, or red, i.e. behind plan by more than 2.5%. The measures are tracked and updated on a monthly basis and during the monthly review cycle the status of the measure in the month, as well as the cumulative achievement year to date is reviewed.

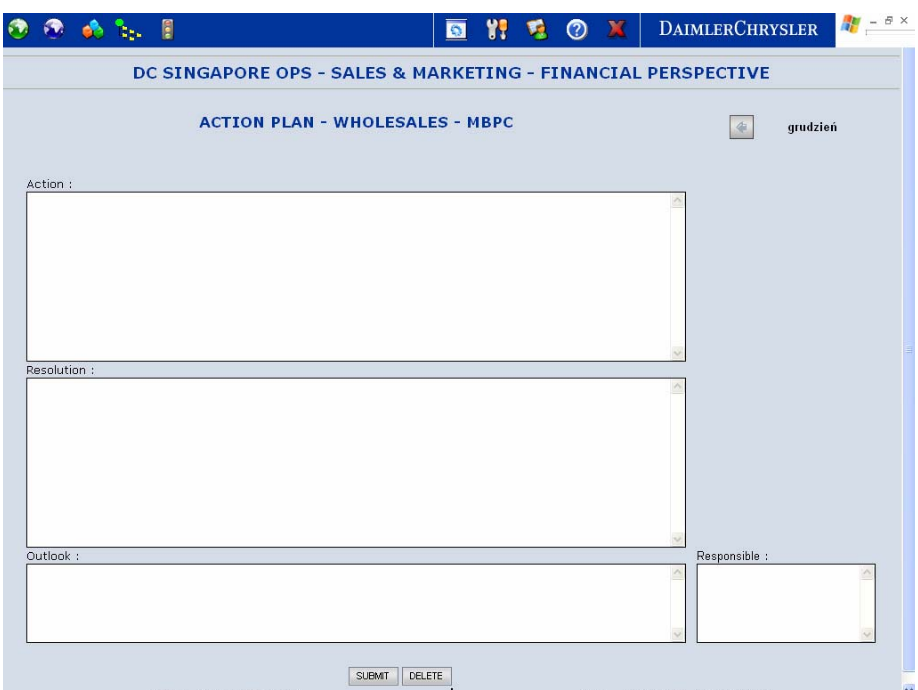
The Balanced Scorecard layout incorporates a plan for each measure for each month, as well as a cumulative year to date plan. The targets on the various measures are primarily derived from the annual operative planning cycle. The actual achievement on the measures is tracked against the plan on a monthly basis, as well as on a cumulative basis. Variances between the plan (or target) and the actual achievement, are expressed in absolute terms, as well as in a percentage deviation. The layout incorporates a comprehensive definition of each measure that can be accessed by selecting the relevant icon. The Balanced Scorecard also incorporates functionality that allows a comparison between achievement for the current and prior year, between the achievement against the plan and any adjusted plan, as well as a perspective on the forecasted achievement on the measure for the whole year.

Figure 8: The layout of the Balanced Scorecard:

Due to the confidential nature of its content this figure has been deleted, but a copy can nevertheless be obtained from the research report filed in the library.

An essential element of the Balanced Scorecard is the action plan functionality.

Figure 9: The balanced scorecard action plan:



When the traffic of light of particular measure is red, the normal requirement is that an action plan has to be captured on the Balanced Scorecard. The format of the action plan requires that the root cause of the non-achievement is defined, that a specific and detailed course of action is defined, together with a numerical outlook on ultimate achievement on the measure and transparency on the individuals or teams that are responsible for implementation of the action plan. The content of action plans and the degree of success in implementing the action plans are normally reviewed on a monthly basis.

The measures that form part of the individual target agreements of senior managers are clearly indicated and the percentage contribution of each measure is also recorded.

Figure 10: Integration of incentivised targets in the balanced scorecard:

Due to the confidential nature of its content this figure has been deleted, but a copy can nevertheless be obtained from the research report filed in the library.

To facilitate the use of the Balanced Scorecard in meetings and during presentations, graphing functionality has been created that visually illustrates the target, actual achievement, as well as forecasted achievement.

Figure 11: Graphical tracking of achievement:

Due to the confidential nature of its content this figure has been deleted, but a copy can nevertheless be obtained from the research report filed in the library.

Appendix C contains a comprehensive example of the measures in one of these scorecards.

The strategic planning process in the DaimlerChrysler world is an annual process that revolves around the so-called operative planning, i.e. a comprehensive sales, manufacturing and financial plan that stretches 3 years into the future. The operative planning should be preceded by a strategic planning process that would scan the environment and would result in a refinement of the articulated strategy. The operative planning would then incorporate the results of the strategic planning and would culminate in targets for important indicators such as number of units wholesaled and retailed, turnover and operating profit. These hard, "rearward looking" targets, together with some "softer", "forward looking" measures that have been derived from the strategy, such as employee satisfaction, customer satisfaction, employment equity target achievement and dealer satisfaction, are then incorporated in the target agreements of the respective Board Members, in accordance with their areas of responsibility.

The next step is then to cascade the targets to the divisional managers and thereafter to departmental managers, and finally to all staff members. These target agreements become the measuring instrument for determining the level at which a particular employee will be paid in terms of the performance based reward system. This system has evolved over several years and currently combines individual achievement of the targets in the goal agreement, an assessment of predefined leadership behaviour, as well as a profit sharing component. The weighting of the various elements are different by level and generally focuses more on individual target achievement the lower the level of the employee. For a divisional manager the weighting would be 40% corporate profit achievement and 60% individual target achievement, with the last mentioned portion being split equally between achievement of the targets contained in the goal agreement and an assessment of leadership behaviour through a robust process involving 360° assessments and a so-called "performance validation meeting" where the results are validated by the next level of management.

DCSA recently articulated its (corporate) strategy in the format of a strategy map (Kaplan & Norton, 2001, 2004a) and the intention is to ultimately incorporate the strategy maps in the Balanced Scorecard.

5. PRESENTATION AND INTERPRETATION OF RESULTS

5.1 Communicating and clarifying the vision

According to Kaplan & Norton (1996b) the first process underlying the successful use of the Balanced Scorecard is communicating and clarifying the company's vision. Most respondents were of the opinion that, although the company's vision may not have been explicitly clear from the Balanced Scorecard, the targets in the Balanced Scorecard were nevertheless derived from the vision and strategy and supported the achievement of the vision and strategy, i.e. the desired future was quantified in a manner that supported concrete targets (Zagotta & Robinson, 2002; Niven, 2002). Senior management was however more emphatic in endorsing the extent to which the Balanced Scorecard communicated and clarified the vision and strategy. The difference between the perceptions of senior management and other employees, could to some extent be explained by the fact that senior managers' targets were all included and tracked in the Balanced Scorecard, whereas the targets of other employees were not all tracked in a similar manner.

The process of identifying measures and setting targets normally involved in the first step the articulation of the strategy by the Board of Management in consultation with mainly the senior management. The second step involved comparing the current collection of measures and structure of targets against the strategy to check whether there was sufficient alignment between the measures, targets and the strategic objectives and to determine whether the targets had to be amended or refined to support the achievement of the strategic objectives. This created a "line of sight" (Niven, 2002) that that allowed employees to see the linkage between their targets and the strategy.

Some measures, however, had a vague historical origin and were not defined from an articulated strategy, but still appeared to support the strategic. The premise was that the achievement of the targets by the individual business units and employees would support the achievement of the company's vision and strategy. Some measures were initially defined based on "gut feel", but more recently there has been a move towards more a more process driven linking of the measures to the strategy. Senior management recently engaged employees at all levels in a process of re-articulating the preferred future, as well as "double-loop learning" (Argyris, 1996) or the re-evaluation of the causal links between different measures. The evidence confirms that the use of the Balanced Scorecard forces management to articulate how performance can be measured in accordance with its strategy (Gautreau & Kleiner, 2001; Niven, 2002).

The strategy and vision was communicated through business breakfasts, documentation on the intranet, posters and brochures, as well as other various communication channels. The Balanced Scorecard, with its set of measures and targets, assisted with communicating and clarifying the strategy and vision from an operational perspective, i.e. making the strategy actionable. Although some of the respondents felt that the complete strategy was not reflected in the Balanced Scorecard, as some components were lacking and had not been successfully translated into goals, there was broad support for the notion that the Balanced Scorecard assisted the company in overcoming the so-called "vision barrier" (Niven, 2002).

The respondents saw the vision and strategy as a longer-term perspective and the measures in the Balanced Scorecard as the short-term objectives that supported the achievement of the vision and strategy. There were some concerns among junior management that the one or two year period that was used as a "time window" for the measures in the Balanced Scorecard was too short and that it could lead to a short term focus and loss of perspective as far as the vision and strategy was concerned.

Senior management was of the opinion that a culture of transparency was essential for the effective functioning of the Balanced Scorecard. In DCSA most employees, even down to specialist level, have access to most of the data on the Balanced Scorecard, including the detailed income statement, and all the respondents felt that this encouraged dialogue and participation. In general the respondents viewed it as essential that the definitions of measures were appropriate, simple and transparent to ensure acceptance and effective tracking of performance against the targets. Malina & Selto (2001) also argued that an effective organisational communication tool had to have valid messages and that an effective management control tool had to have measures that were objective, verifiable and promoted good performance.

Some of the respondents, especially at senior management level, were of the opinion that the high level of financial incentives that were linked to individualised targets sometimes resulted in behaviour that was contrary to the interests of the company. The employees' efforts were in these instances aimed purely at the achievement of the targets, regardless of the context or potential negative impact to the company. This was, however, perceived by senior management to be a problem only in the ranks of employees at junior management, specialist or administrative level where the sense of ‘ownership” and the level of alignment between individual and company objectives was felt to be lower than at senior management level. The financial incentives were also seen by senior management to be limiting the extent to which employees engaged in cross functional activities. Deckop, Mangel & Cirka (1999) also identified that the organisational citizenship behaviour of certain categories of employees could be compromised by pay for performance schemes. These impacts were however mitigated by the adoption of some “team targets” that required cooperation between employees in various business units.

The respondents generally stressed that the successful use of the Balanced Scorecard required a balanced set of perspectives and not only focus on the financial perspective. They also felt that one should have a tolerance for some “softer” measures that may not always be easy to measure, but which were essential to the continued success of the company. Some of the softer measures that were tracked were employee satisfaction, customer satisfaction and dealer satisfaction through surveys that were then expressed as indices. Senior management was nevertheless concerned that these measures tended to be static and did not sufficiently take into account the competitive environment.

Respondents from the ranks of junior management urged that the role of the Balanced Scorecard had to be clear.   If it was only intended to be a management reporting tool with “hard” measures, it had be identified as such, to avoid a situation where all the “traffic lights” on the Balanced Scorecard may be green, but in reality problems existed that may not be apparent from the measures on the Balanced Scorecard.

From the interviews it was apparent that the use of the Balanced Scorecard was more widely accepted and supported in the areas that were nearest to the business, i.e. at the so-called “lines of business”, where employees interfaced directly with customers or the dealer network, where the measures were clearer and more directly related to the strategic objectives of the company, and some concerns existed in the support areas about the link between their activities and targets and the strategic objectives.

The respondents in general felt that one had to avoid measures that were too aggregated (i.e. on had to avoid having too many team targets), but one also had to guard against setting targets at a level where the strategy could not be defined in meaningful terms. Some members of senior management expressed the view that from the last level where the strategy could be expressed in meaningful terms, its implementation had to be supported by position profiles and appropriate target agreements.

Most of the respondents were of the opinion that too much time was being spent on defining and tracking measures and that this diverted management attention away from addressing the root causes of the problems. In line with the findings of Johnston *et al* (2002), there was consensus that the measures and the measurement processes could be simplified and that this would in fact lead to a better balance.

Junior management in general were of the opinion that there was a tendency among senior management to favour the "harder" more short term financially oriented targets, and that there was resistance to including targets that were somehow "softer", but could be important indicators of future performance.

5.2 <u>Linking individual behaviour to the strategy</u>

The Balanced Scorecard in DCSA links individual behaviour to the strategy in a two-step process. The first step was described in 5.1 above and involves the clarification of the strategy and vision by converting them into measures and targets that were measurable and actionable. The second step is incorporating the targets in the performance based reward target agreements of firstly senior management, and then following a process of cascading the targets down to employees at the lowest level in an effort to ensure total alignment of effort at all levels.

Senior management were of the opinion that one of the biggest benefits of the Balanced Scorecard was that it combined financial and other information and allowed for the integration of reviews that had in the past been conducted separately. This firstly saved time and introduced efficiency in the review process, and secondly supported the adoption of a balanced and integrated perspective insofar as tracking of performance against the strategy and the evaluation of cause and effect relationships was concerned.

Most respondents were of the opinion that the Balanced Scorecard had however become too complex and that an effort to make the measures in the Balanced Scorecard comprehensive was resulting in a loss of focus on the key performance indicators and was in some instances even compromising the accuracy of the data on the Balanced Scorecard. Kaplan & Norton (2001) argued that it was essential for the proper functioning of the Balanced Scorecard to have the right number of measures and not too few or too many. The respondents felt that it was sometimes difficult to guarantee the integrity of the data and that, although this was a technical issue, the data integrity was essential for the credibility and acceptance of the system. Johnston *et al* (2002) identified that other companies were also reacting against the proliferation of measures and the time spent on populating the measurement systems, by striving for simplicity despite the complexity of their business.

The historical data on the Balanced Scorecard could be used to assess the success of action plans, and the graphs on the Balanced Scorecard could be used effectively in meetings to identify trends. The Balanced Scorecard thus effectively recorded the realised strategy, i.e. the pattern of past actions, as well as its deliberate strategy, i.e. the plan that will be produce the desired pattern of actions in the future (Mintzberg, 1987). It also allowed management to reassess the governing variables (Argyris, 1996).

Only targets of senior and some junior management were on contained comprehensively on the Balanced Scorecard and other employees would not find all their targets on the Balanced Scorecard. Respondents from the ranks of junior management and specialists nevertheless agreed that the measures on the Balanced Scorecard impacted on their individual performance, as most of them had team goals and the review of the measures focused and energised the teams. This was nevertheless more problematic in the support areas, such as the Finance and Human Resources divisions, where the measures were not that clearly or explicitly linked to corporate performance and where the measures on scorecards other than their own were sometimes more important, as their primary function was to support these other areas.

At the level of junior management and specialists, a number of respondents felt that some measures were too aggregated and not set at the right level and that this reduced motivation as they had little or no influence over the measures. Kaplan & Norton (2001) stressed that Balanced Scorecards and their measures had to be defined at a level where a meaningful strategy exists and Armstrong & Barron (1998) argued that good measures should be relevant to the objectives and accountabilities of teams and individuals concerned. The respondents were unanimous in their view that the proper functioning of the system required that the targets were formulated and set in such a manner that the achievement of the target was subject to the influence of the employee who is given the target.

A number of senior managers were of the opinion that the proper integration of the Balanced Scorecard into the other software applications and information systems in the company was essential to ensure the continued acceptance and relevance of the Balanced Scorecard. They believed that to be truly effective, the Balanced Scorecard had to become the central repository of information, a trusted source that was consulted by management on a daily basis to direct their efforts. They viewed it as not only frustrating and time consuming to interrogate various systems on a daily basis, but it also limited the effect of the balanced perspectives in the Balanced Scorecard as information was once again being viewed in isolation in discreet systems. Such an integration of systems would also facilitate the frequent updating of information on the Balanced Scorecard, an area where most of the respondents felt that the process could be improved.

Respondents from all levels expressed the view that an open and honest management culture was an essential component of the successful use of the Balanced Scorecard. Management had to have the confidence to give an honest outlook of where performance against a certain measure would be at year end, as this enabled the definition and timely implementation of action plans aimed at addressing the performance deficiency. Some respondents nevertheless had the perception that the fear of negative consequences sometimes resulted in management only giving the "good news", i.e. giving an outlook that anticipated achievement of the target and then quietly and behind the scenes attempting to garner cross-functional support for the implementation of some "unofficial" action plan that would aim to ensure achievement of the target.

Respondents across all levels viewed it as essential that targets were not adjusted during the period for which they had been set, as this resulted in a loss of credibility. In line with the findings of Malina & Selto (2001) the respondents in this study also felt that the targets had to be based on relevant benchmarks. Although junior managers and specialists expressed greater support for targets that had been agreed to in a consultative process, they also accepted that some targets had to have a "one size fits all" approach.

Whereas senior management initially held the opinion that employees at the lower levels had to have more targets than those at higher levels, recent trends have lead them to the conclusion that employees at lower levels in fact had to have fewer targets, and that these had to be a proper combination of individual and team or company targets. Senior management also felt that the incentive system had to direct behaviour in line with specific requirements of the company in the time period it was, in direct in support of strategy, and that an employee's position profile may stay the same, but the targets should change. Niven (2002) argued that although incentive systems support the linking of individual behaviour to the strategy, the challenge remained in defining the "measures that matter" (Ernst & Young, 1998, 2001) at the various levels in the organisation.

Senior management felt that although the performance based reward system supported the objectives of the Balanced Scorecard and assisted greatly in achieving the strategic objectives, a uniform approach could not be adopted for employees at all levels in the company.

There was no support to be found for the findings of Lipe & Salterio (2000), as well as Banker, Chang & Pizzini (2004), that only measures that were common between individuals would be taken into account when evaluating performance, but these findings were also not contradicted.

Malina & Selto (2001) suggested that an effective organisational communication tool, such as the Balanced Scorecard, had to convey messages that were understandable, reliable, complete and resistant to manipulation or distortion, and had to support the notion that individual or group reward was based on actual performance. They also argued that a Balanced Scorecard that conveyed valid messages, supported the organisational culture by reinforcing desired patterns of behaviour, and promoted knowledge sharing, participation and dialogue, would promote strategic alignment, positive motivation and positive organisational outcomes. The perceptions of the respondents in general seem to support these assertions.

5.3 Linking resource allocation to the strategy

The Balanced Scorecard influenced resource allocation in two ways. It firstly clarified the strategic priorities and influenced the allocation of funds. The Balanced Scorecard assisted management in identifying the main drivers of corporate performance and allowed them to set appropriate targets for these measures. The achievement against the targets, as well as against the achievement from prior periods could then be tracked on the Balanced Scorecard. The Balanced Scorecard facilitates the process of bringing together the results of the strategic planning process, as well as the operative planning process that determines the financial targets for a 3 year period. In this way the financial targets supplement the strategic targets, but they are also informed by and support the achievement of the strategic targets. The targets in the Balanced Scorecard effectively become the "milestones" (Kaplan & Norton, 1996b) for the achievement of the targets that have been identified as part of the 3 year plan.

Secondly, the Balanced Scorecard provided transparency on the utilisation of the funds. The operational budget of all business units are displayed on the Balanced Scorecard in great detail and from various perspectives. Any deviation from the budget has to be explained and appropriate action plans have to be identified to address the negative development. The Balanced Scorecard also allowed management to evaluate the budget development together with other indicators of performance and to assess the relationship between the measures.

5.4 Strategic feedback and learning

Respondents from the ranks of senior management were of the opinion that one of the prerequisites for feedback and learning from the Balanced Scorecard, was the adoption of a robust "traffic light system". A great deal of effort firstly had to be directed at determining whether a positive or negative variance would result in a green or red "traffic light", or whether both a positive and negative variance could be green and red, but that the achievement had to be in a pre-defined range around the target value. Consideration also had to be given to the level of deviation from the target that would be tolerated as being acceptable and that would result in an amber "traffic light". Insufficient attention to these details resulted in measures being what senior management referred to as "green-red", i.e. measures were red on the Balanced Scorecard, but this was due to any number of reasons seen to be "good" as opposed to something that required attention and action. This then caused an undermining of the impact of a red "traffic light", as it could be "explained away" as opposed to requiring the definition and implementation of an action plan.

The use of the Balanced Scorecard also provided transparency on the way in which managers responded to targets and could provide guidance on the setting of future targets. In a company with an honest and transparent management culture stretch targets could be set through a consultative process, but in the absence of such a culture the targets would have to be set centrally to prevent "sandbagging" from frustrating the adoption of targets that would optimise the performance of the company.

The feedback and learning process was in the opinion of senior management sometimes frustrated by the approach taken towards the definition of action plans to address red "traffic lights" on the Balanced Scorecard. They felt that a slavish approach that requires action plans for all red "traffic lights" tended to diminish the quality of the action plans, as well as the diligence in following up on the multitude of action plans. Most of the respondents were of the opinion that a sober approach to the definition of action plans that focussed on the most important measures with the highest impact first, allowed management to put effort into the creation of appropriate and effective action plans that could implemented and monitored properly. Some senior managers nevertheless felt that the feedback and learning process had to be part of a separate review, as the "metabolic rate" of these links was a lot slower than the monthly or annual review cycle.

This research attempted to identify some of the contingent variables that influenced the effective implementation of strategy using the Balanced Scorecard. The purpose was to identify which factors have helped or hindered the effective use of the Balanced Scorecard to implement strategy in DCSA.

The effective use of the Balanced Scorecard to implement strategy

The **literature review** indicated that the various factors influenced the effective use of the Balanced Scorecard to implement strategy. The following is a summary of the factors identified in the literature review that were **supported** by the findings of the case study:

- Leadership, or the ability to gain the "hearts and minds" of the employees and relying on them to find innovative ways of doing things (Kaplan & Norton, 2001)
- Constructing Balanced Scorecards at a level in the organisation where a strategy existed and that required alignment and integration (Kaplan & Norton, 2001)
- Having the right number of measures and not to few or too many (Kaplan & Norton, 2001)

The effective use of the Balanced Scorecard to implement strategy
• Adopting Balanced Scorecard measures that were measured effectively (Malina & Selto, 2001) • Using Balanced Scorecard measures that were aligned with the strategy (Malina & Selto, 2001) • Defining a Balanced Scorecard that constituted a comprehensive measure of performance that supported strategy implementation (Malina & Selto, 2001) • The use of Balanced Scorecard measures that were seen to be causally linked to each other (Malina & Selto, 2001) • The use of a system where the achievement of Balanced Scorecard measures were linked to meaningful rewards (Malina & Selto, 2001) • The incorporation of benchmarks in the Balanced Scorecard that were appropriate and useful for guiding change (Malina & Selto, 2001) • Not using measures that were inaccurate or too subjective (Malina & Selto, 2001) • Two-way communication regarding the content of the Balanced Scorecard (Malina & Selto, 2001) • Avoiding inappropriate benchmarks (Malina & Selto, 2001) • Not having too many measures (Johnston *et al*, 2002) • Adopting a measurement process that was not too time consuming or onerous (Johnston *et al*, 2002)

6. CONCLUSION

6.1 Factors assisting the effective use of the Balanced Scorecard

The value of this research is twofold. In the first instance it provided an opportunity to examine the functioning of the Balanced Scorecard in a real environment, in South Africa, and secondly it is of value to the company involved as the results of the study could assist the company with improving its use of the Balanced Scorecard.

In summary, the respondents were of the opinion that the following factors helped the effective use of the Balanced Scorecard in DCSA to implement strategy:

6.1.1 The measures in the Balanced Scorecard gave a balanced overview of the business from four crucial perspectives and ensured the integration of these perspectives in the fundamental management processes

6.1.2 It served as a central, trusted communication tool that ensured that there was only "one reality" that was shared by all

6.1.3 The fact that there was only one source of data also avoided time consuming reconciliations between different sets of data from different systems. Most companies have the relevant data somewhere in a row and column of a spreadsheet, but the Balanced Scorecard consolidates and organises the data in such a way that it becomes "actionable" for management and thus enables the effective execution of strategy

6.1.4 The Balanced Scorecard was supported by senior management, was widely accepted and was used as the main reporting tool in the monthly results review cycle that culminated in the Board of Management meeting

6.1.5 The information in the Balanced Scorecard was available or accessible to most employees, which promoted transparency and resulted in increased awareness about developments in and the performance of the company

6.1.6 The Balanced Scorecard combined various types of data into a single reporting tool and resulted in a range of review meetings being integrated into one review, and ensured that problems were addressed in an integrated and strategic manner rather than on an ad hoc basis with disregard for other influences

6.1.7 Robust review and action planning guaranteed that the psychological effect of a red "traffic light" next to a measure on the Balanced Scorecard ensured rapid and focussed action

6.1.8 The detailed nature of the measures on the Balanced Scorecard focused attention on the real issues as management could see which products were behind plan and this allowed management to address the root causes at the appropriate level and to avoid "general solutions" that could have unforeseen adverse effects

6.1.9 Management time was expensive and where there was previously a tendency to only discuss the "good news", whereas the Balanced Scorecard forced management to focus on the areas that required attention, as the Balanced Scorecard ensured full transparency

6.1.10 The Balanced Scorecard was an effective communication tool that eliminated the need for additional presentations and avoided extra work, thereby promoting efficiency. It was a single mechanism that allowed for effective communication upwards and downwards.

The effective use of the Balanced Scorecard also depended on the Balanced Scorecard not having to compete with other reporting systems. The definition and measurement of measures also had to be kept simple to ensure that the benefit derived from the system outweighed the time invested in populating the data. To be successful, the Balanced Scorecard required the support of top management and they had to win the "hearts and minds" of the employees. At the time of implementation, they had to dictate that the Balanced Scorecard would be the only system that the company would use and had to force some level of initial acceptance. It was furthermore essential to derive a good, balanced set of measures, but not to attempt to get the best or ultimate set of measures before proceeding with implementation. This process of defining the "corporate agenda" was in itself beneficial for the implementation of strategy, as it ensured convergence in the views of employees on what really mattered in the organisation. It was in the initial stages of implementation of the Balanced Scorecard also essential to have key proponents of the Balanced Scorecard that could "spread the word" regarding the methodology and benefits of the Balanced Scorecard.

The processes supporting the Balanced Scorecard ensured continuous review and improvement and should result in the refinement of measures and measuring processes over time. As far as possible one had to avoid subjectivity in the definition and measurement of measures, especially where the measures were incorporated in the performance based reward system. This did not, however, mean that all "softer" measures had to be eschewed, but that a robust and acceptable definition and measurement process had to be agreed in advance. To ensure credibility, the backbone of the system nevertheless had to be numeric targets that were capable of independent verification.

The Balanced Scorecard in DCSA has evolved over time, but the basic measures still remains the same. The overlap between the various perspectives, as well as the various scorecards has been reduced, the definition and tracking of measures has been refined and the structure of the top-level scorecards and the "drill downs", i.e. detailed data of a particular measure, has been improved. Experience has taught the value of emphasising the importance of clear action plans and of having a simple, but linked set of meetings. Over time it became clear that the frequency of reporting was essential, but this required a balance between effort and the benefit derived from it. Initially there was a daily Balanced Scorecard, but this resulted in administrative effort that exceeded the benefits of having daily data. It also became clear that it was of little benefit to have measures when the data was not reliable, not available easily, not credible or not updated regularly.

6.2 Factors hindering the effective use of the Balanced Scorecard

The respondents were of the opinion that the following factors hindered the effective use of the Balanced Scorecard in DCSA to implement strategy:

6.2.1 The unnecessary proliferation of measures in some areas had to be addressed, as well as the addition of unnecessary functionality that tended to divert attention away from the process of defining and implementing action plans. The process of measurement should not be the main focus, but rather the quality of the decisions that were made, supported by a process of "good enough" measurement (Johnston *et al*, 2002)

6.2.2 A higher level of integration with other systems, such as SAP, would improve the usefulness of the system and would result in more regular and wider use of the system

6.2.3 There were a limited number of measures that are forward looking. Some measures did serve as an indicator of future developments, such as customer satisfaction index, as it was assumed that a positive development on this measure would lead to repurchase. Dealer and employee satisfaction was also tracked in similar manner, as well as penetration rates (also of related businesses in our sales) and sales of value added products (finance and insurance) that "tie" customers to our business. More detailed and accurate measures were nevertheless required in the areas of customer knowledge, customer intimacy and the ease with which customers could do business with the company

6.2.4 A better balance was also required between the four perspectives, as there was extensive focus on the financial perspective. The learning and growth perspectives were somehow neglected in certain scorecards

6.2.5 Some measures on the Balanced Scorecard had no real measurement behind it, was never discussed, never followed-up, and needed a qualitative individual assessment to determine the level of achievement. These measures were felt not be useful for wider communication and only relevant for the individual performance based reward system

6.2.6 The definition and measurement process had to be made transparent in all areas

6.2.7 Measurements had to be simplified, as measures that were unnecessarily complicated resulted in a loss of buy-in from employees

6.2.8 It also leaded to inefficiency when measures were very complex

6.2.9 More extensive use of strategy maps (Kaplan & Norton, 2001) could improve the alignment of measures to the articulated strategy (and to overcome the concerns of Schneier, Shaw & Beatty (1991) that most company's were identifying the "wrong targets) and would also facilitate better understanding of the strategy.

The effective use of the Balanced Scorecard to implement strategy
The **case study** indicates that the following factors influence the effective use of the Balanced Scorecard to implement strategy: • Leadership, or the ability to gain the "hearts and minds" of the employees • Establishing the Balanced Scorecard as the trusted and central communication tool that established the "one reality" • Acceptance and support for the Balanced Scorecard from senior management • Wide and unrestricted access to the information in the Balanced Scorecard • Having individuals that actively promote the Balanced Scorecard • Constructing Balanced Scorecards at a level where alignment can be meaningful • Having the right number of measures and not to few or too many

The effective use of the Balanced Scorecard to implement strategy
• Adopting an approach of "good enough" measurement, that balances the benefits of measurement with the time and effort spent on measuring • Having a robust process for defining and tracking the implementation of action plans • Integration of the Balanced Scorecard process in the resource allocation process • Effective measurement of Balanced Scorecard measures • Alignment between Balanced Scorecard measures and the strategy • Creation of a comprehensive and balanced set of measures that support strategy implementation • Adoption of Balanced Scorecard measures that are seen to be causally linked to each other • Linking the achievement of Balanced Scorecard measures to meaningful rewards • Using appropriate benchmarks in the Balanced Scorecard • Using measures that are accurate and not too subjective, and ensuring the numeric, measurable targets form the backbone of the system • Ensuring open communication regarding the content of the Balanced Scorecard • Streamlining the measurement process

6.3 Suggestions for further research

Further research could investigate the following questions:

6.3.1 What methodology could be implemented to track the "softer" measures?

6.3.2 Is there a causal link between the effective implementation of strategy and the use of the Balanced Scorecard in South African organisations?

6.3.3 What is the relative importance of the various factors affecting the effective implementation of strategy using the Balanced Scorecard?

It would appear that the existing theory is supported by the results of this research and further research could focus on identifying the underlying cause and effect relationships that underpin the theory.

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APPENDIX A

Consistency Matrix

Title of research: Factors influencing the effective use of a Balanced Scorecard to implement strategy.

Research problem: The research problem: To determine the factors that influence the effective use of the Balanced Scorecard to implement strategy.

Sub-problems: The first sub-problem: To determine the factors that assist the effective use of the Balanced Scorecard to implement strategy.

The second sub-problem: To determine the factors that hinder the effective use of the Balanced Scorecard to implement strategy.

Research problem	Research question	Source	Data	Method of analysis
To determine the factors that influence the effective use of the Balanced Scorecard to implement strategy	The research indicates that the following factors influence the effective use of the Balanced Scorecard to implement strategy: In general: • Leadership, or the ability to gain the "hearts and minds" of the employees and relying on them to find innovative ways of doing things • Constructing Balanced Scorecards at a level in the	Kaplan & Norton (1996a, 1996b, 2001, 2004) Porter (1996, 1997) Hamel & Prahalad (1990) Prahalad & Hamel (1990)	Semi-structured interviews; documentation; observations	Content coding and conclusions

Research problem	Research question	Source	Data	Method of analysis
	organisation where a strategy exists and that requires alignment and integration • Having the right number of measures and not to few or too many • Process failures • Integration of the Balanced Scorecard process in the resource allocation process <u>Positive impact will result from</u>: • Balanced Scorecard measures are measured effectively • Balanced Scorecard measures are aligned with the strategy • Balanced Scorecard measures are reliable guides for change or improvement • The Balanced Scorecard constitutes a comprehensive measure of performance that supports strategy implementation • Balanced Scorecard measures are seen to be causally linked to each other • Achievement of Balanced Scorecard measures are linked to meaningful rewards	Mintzberg (1987) Barr (1998) Niven (2002) Malina & Selto (2001) Ittner, Larcker & Meyer (2001) Robbins (2001)		

Research problem	Research question	Source	Data	Method of analysis
	• Benchmarks in the Balanced Scorecard are appropriate and useful for guiding change <u>Negative impact will result from</u>: • Measures that are inaccurate or too subjective • One way communication regarding the content of the Balanced Scorecard • Inappropriate benchmarks • Having too many measures • Measures are not related to the strategy • The measurement process is too time consuming or onerous **<u>Research question</u>:** Which factors have helped or hindered the effective use of the Balanced Scorecard to implement strategy in DaimlerChrysler South Africa (Pty) Ltd?			

APPENDIX B

Questionnaire for the semi-structured interviews

General open-ended question to start the interview:

Please tell me about the use of the Balanced Scorecard in DaimlerChrysler South Africa (Pty) Ltd.

Please tell me about how your Balanced Scorecard assists you with:

- Communicating and clarifying the company's vision
- Linking individual behaviour to the strategy
- Linking resource allocation (e.g. the annual budgeting cycle) to the strategy
- Strategic feedback and learning (i.e. understanding the causal relationships between measures in your Balanced Scorecard).

Probing questions*:

1 Please describe the Balanced Scorecard in your own words.

2 What do you think are the objectives of the Balanced Scorecard?

3.1 What are the measures that are included in your Balanced Scorecard measuring?

3.2 How does the fact that you measure something influence individual performance?

3.3 In your opinion, why does the measurement process have such an impact on individual performance?

4.1 How do the measures in your Balanced Scorecard relate to the company's performance?

4.2 Does the Balanced Scorecard reflect the company's strategy in a holistic manner?

5 Do changes in your performance cause changes in the performance measures of the company?

6 Do the measures in your Balanced Scorecard and the company's Balanced Scorecard assist you in any way? If so, how?

7.1 Are there any benefits from the Balanced Scorecard itself, apart from the individual measures?

7.2 Does the Balanced Scorecard have an impact on resource allocation decisions?

8 Do you have any recommendations for improving the Balanced Scorecard?

*Source: Adapted from Malina & Selto (2001)

APPENDIX C

Extracts from the Balanced Scorecard at DCSA

FINANCIAL PERSPECTIVE	CUSTOMER PERSPECTIVE	PROCESS PERSPECTIVE	PEOPLE PERSPECTIVE
Retail sales	Market share total commercial vehicles	Stock reach	Employment equity
MCG	Mediums	Stock Reach MCG	Employee satisfaction index
Mitsubishi Motors	Heavies	DCSA	
Chrysler / Jeep	Extra Heavies	Dealer	
MB CV	FREIGHTLINER / FUSO	Stock Reach Mitsubishi Motors	
FREIGHTLINER / FUSO	Market share passenger cars	DCSA	
Wholesales	MCG	Dealer	
MCG	Mitsubishi Motors	Stock Reach Chrysler / Jeep	
Mitsubishi Motors	Pajero / Outlander	DCSA	
Chrysler / Jeep	Lancer	Dealer	
MB CV	Chrysler / Jeep	Stock Reach MB CV	
FREIGHTLINER / FUSO	Vito Crew Bus	DCSA	
Turnover	Market share light commercial vehicles	Dealer	
MCG	Colt	Stock Reach FREIGHTLINER / FUSO	
Mitsubishi Motors	Vito Panel Van & Crew Cab	DCSA	
Chrysler / Jeep	Overall customer satisfaction index	Dealer	
MB CV	Overall PC CSI (Sales &Service)	Old stock	
FREIGHTLINER / FUSO	Overall CSI MCG	MCG	
Contribution	Sales	Mitsubishi Motors	
MCG	Service	Chrysler / Jeep	
Mitsubishi Motors	Overall CSI Mitsubishi Motors	MB CV	
Chrysler / Jeep	Sales	FREIGHTLINER / FUSO	
MB CV	Service	Built-up stock (including dealer stock)	
FREIGHTLINER / FUSO	Overall CSI Chrysler / Jeep	MCG	
Contribution as % of turnover	Sales	Mitsubishi Motors	
MCG	Service	Chrysler / Jeep	

FINANCIAL PERSPECTIVE	CUSTOMER PERSPECTIVE	PROCESS PERSPECTIVE	PEOPLE PERSPECTIVE
Mitsubishi Motors	Overall CV CSI (Service Only)	MB CV	
Chrysler / Jeep	Overall CSI MB CV	FREIGHTLINER / FUSO	
MB CV	Overall CSI FREIGHTLINER / FUSO	Demonstration, pool & press vehicles	
FREIGHTLINER / FUSO	Data quality compliance	MCG	
Group contribution	Overall PC	Mitsubishi Motors	
MCG	Overall MCG	Chrysler / Jeep	
Mitsubishi Motors	Overall Mitsubishi Motors	MB CV	
Chrysler /Jeep	Overall Chrysler / Jeep	FREIGHTLINER / FUSO	
MB CV	Overall CV		
FREIGHTLINER / FUSO	Overall MB CV		
Group contr. excl. prop cost & exch. rate	Overall FREIGHTLINER / FUSO		
MCG	Overall dealer satisfaction index		
Mitsubishi Motors	Forecast accuracy		
Chrysler / Jeep	Forecast Accuracy (PC)		
MB CV	MCG		
FREIGHTLINER / FUSO	Mitsubishi Motors		
Overheads by division	Chrysler / Jeep		
MBM Passenger Cars	Forecast Accuracy (LCV)		
MBM CV	Forecast Accuracy (CV)		
Mercedes Benz PC	MB CV / Buses		
Mitsubishi Motors	MB CV		
Chrysler / Jeep	FREIGHTLINER / FUSO		
MB CV	Dealer profitability		
People Transport			
FREIGHTLINER / FUSO			
Parts			
Service			
Dealer Development			
GKAM			
Supply Chain Management			
Customer Focus			
CV Technical Support			

FINANCIAL PERSPECTIVE	CUSTOMER PERSPECTIVE	PROCESS PERSPECTIVE	PEOPLE PERSPECTIVE
CV Operations			
Dealer Audits			
Motor sport			
Sales Planning & Distribution			
Overheads by cost category			
Wages			
Salaries			
Employee Expenses			
Total Personnel Costs			
Maintenance			
LIP DIP			
Travel & Entertainment			
Services			
Marketing			
Other Overhead Expenses			
Total Sundry Expenses			
Depreciation & Obsolescence			
Overhead Recoveries			
Total Overheads			
Inventory			
MCG			
Mitsubishi Motors			
Chrysler / Jeep			
MB CV			
FREIGHTLINER / FUSO			
MLC Stock			
MCG			
Mitsubishi Motors			
Chrysler / Jeep			
MB CV			
FREIGHTLINER / FUSO			