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CIMA

Effective Performance Management with the Balanced Scorecard

Technical Report

INSEAD

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Introduction

To manage and deploy organisational resources in such a way as to deliver and fulfil organisational objectives is a vital role of senior finance and management professionals. Many tools, techniques and frameworks have evolved to assist managers in this: value-based management, total quality management, the performance prism, and more.

This report focuses on one such framework: the balanced scorecard. Of the tools designed to improve corporate performance, the balanced scorecard has probably been the most popular. Originally developed as a performance measurement tool, the scorecard is now associated increasingly with strategy implementation. It acts as a management framework with the potential to identify and exploit organisations' key value drivers to their best strategic advantage.

This report considers the more recent developments in scorecard thinking, in particular the key role of strategy mapping. It outlines how, through wide application, and facing ever-changing operating conditions, the scorecard has developed over the last ten years, to support different organisational 'missions' – from profit maximisation, to service delivery or resource optimisation. For example, many organisations are realising increasingly that much of their strategic value lies in their people, systems, processes and ability to innovate – this report includes an explanation of how organisations can integrate the potential of these intangibles in their scorecard.

The scorecard has been used successfully by organisations (public, private and not-for-profit) to realise and integrate the strategic contribution of all relevant organisational value drivers for two key reasons:

First, it helps to ensure consistency and alignment between the non-financial and the financial measures, (this helps to facilitate the alignment of the measures and strategy).

Second, it helps to identify and measure the specific value drivers that underpin performance. This allows managers to test their hypotheses on what is driving organisational outcomes.

The report considers the use of the balanced scorecard to link strategy to resources and then to performance measures, and offers guidance on the strategy mapping process to ensure robust cause-and-effect linkage. New approaches to bridging the gap between strategy and the balanced scorecard such as value-creation mapping and the value dynamics framework are profiled.

To help organisations' scorecard design, the report includes:

- Case-study based observations and practical advice from two organisations that have implemented a balanced scorecard approach.
- Extensive references and signposts to further information and advice.

In addition to the balanced scorecard, many organisations use a range of tools and techniques to improve performance. It is important to integrate these with the scorecard approach and we recommend therefore that this report be read in conjunction with resources on other management accounting techniques such as value-based management, activity-based costing, quality management and business process re-engineering. Recommended reading can be found at www.cimaglobal.com/sem

1. Development of scorecard thinking

1.1 From performance measurement to strategic management

The balanced scorecard is a management framework which, since its inception by Kaplan and Norton in the early 1990s, has been adopted, modified and applied by hundreds of organisations worldwide. If understood thoroughly and implemented appropriately, its potential contribution to organisational success – however measured – is fundamental.

The scorecard translates vision and strategy into four notional quadrants. In the original offering from Kaplan and Norton, these quadrants reflected the following perspectives and implications of the strategy:

- Financial;
- Customer;
- Internal business processes; and
- Organisational learning and growth.

(An overview of the balanced scorecard can be found at: www.cimaglobal.com)

The key to the popularity of the scorecard may lie in its flexibility and adaptability. Whether for commercial organisations, governed by profits, public sector operations governed by service delivery, or not-for-profit organisations driven by commitment to a particular cause, a scorecard that improves performance (either through performance measurement, or via strategy refinement), can be developed.

When first developed, the scorecard was positioned as a holistic performance-measurement framework, which could provide management with useful information relating to financial performance, internal processes, customer perceptions and internal learning and growth.

The opportunity to use such information to satisfy the concerns of not only internal management but also external stakeholders was soon acknowledged, and companies such as Sears, Citicorp, and AT&T, as well as numerous public sector organisations developed such 'stakeholder scorecards'. By first identifying the interested parties whose objectives they sought to satisfy, (shareholders, customers, employees, suppliers etc), the organisations then defined goals for each and developed stakeholder cards of appropriately balanced stakeholder-related measures and targets, in an attempt to meet the needs of all.

These second-generation scorecards allow individuals and teams to define what they must do well to contribute to higher-level goals. They are found most frequently in manufacturing and healthcare organisations, especially those that have been implementing total quality management programmes (TQM, Malcolm Baldridge award initiatives), which generate many measures to monitor processes and progress. Such stakeholder scorecards, were criticised by some, as being little more than an extended list of key performance indicators (KPIs).

As organisations developed their own scorecards to measure performance, each generated valuable information, relating to many aspects of organisational activity.

Close analysis of this information, added to organisational knowledge of operations and their impacts, made people aware of the potential of the framework from a performance management perspective rather than one of performance measurement.

The underlying premise of the strategic scorecard is straightforward: that all the actions determined by management decisions and implemented to promote strategy realisation, have an impact. To successfully contribute to achievement of an organisation's mission, the scorecard must effectively interpret strategy into operational terms. Strategy is thus 'operationalised' through the assumed relationships between actions and their impacts. By measuring these impacts (via the scorecard's identified key performance indicators), management information – which informs decision-making – is created.

Importantly, by introducing this concept of 'causality' into scorecard design, more recent refinements to balanced scorecard use have exploited its potential value as a framework for strategic management. Through the use of 'strategic objectives', many organisations, both private and public, have used the scorecard to place strategy, rather than financial metrics (simple budgets, economic value added, shareholder return etc.) at the heart of their management processes. Strategic objectives, first represented as short sentences attached to each of the four perspectives, can be used to highlight the essence of the organisation's strategy relevant to each. Measures that reflect progress towards the achievement of these objectives are then selected.

The identification of 'causality' – action and resultant impact – between and within scorecard perspectives, marked a significant development in scorecard understanding and application. Identifying assumed causality within the scorecard design was the catalyst for the scorecard's leap of value, from a framework for measuring organisational performance (second-generation scorecards), to one which may, if fully embedded in an organisation, lead to strategy refinement. This is being called the 'third-generation balanced scorecard'.

Inherent in these third-generation scorecards is the graphical representation of organisational activity as a series of 'linkages'.

Generation 1:
Using a balance of financial and non-financial performance measures, long- and short-term horizons, and external as well as internal perspectives.

Generation 2:
Using balanced scorecard design to understand the business model through value propositions and the causal relationships between objectives.

Generation 3:
Testing the business model by securing greater clarity between the assumed non-financial drivers of performance and cash flow.

1.2 Strategy mapping:

1.2.1 An introduction

It is critical to note that the scorecard itself is NOT a tool for strategy formulation, rather it is a description and interpretation of the strategy, founded on assumed/hypothesised causal links between actions and their impacts.

Kaplan and Norton noted the value of articulating and representing graphically such links between actions ('drivers' or 'lead' indicators) and desired outcomes ('lag' indicators). They termed the representation process 'strategy mapping'. The identification and effective management of such causal relationships is the anchor to the success of the 'strategy scorecard', and shows how assets can be deployed, results measured and resources managed to achieve desired strategic results.

The strategy map is a general, logical and comprehensive architecture for describing the strategy framework. It is only when this is achieved that management can claim to understand the key drivers behind organisational performance and view the business model through a single lens.

Strategy mapping provides an opportunity to articulate the key strategies or initiatives that management intends to adopt to achieve the strategic objectives. The mapping process can be effective in closing the gap between the strategic vision/direction and the operational activities of the organisation – ensuring better execution of strategy.

Thus, the balanced scorecard design process is founded on the premise of strategy as a set of hypotheses about cause and effect. These hypotheses form the strategy for moving the organisation from its current position to where it wants to be. (Organisations can sometimes find it helpful to state this desired position by formulating a 'destination statement').

Importantly, having developed the scorecard and by using the associated performance metrics, the cause and effect relationships between actions and impacts are both explicit and testable. As such, it should be possible for a third party to understand an organisation's strategy, and how this is to be achieved from an effective and well-constructed strategy map.

Building the strategy map

It is crucial that a balanced scorecard represents a chain of assumed cause and effect links between and within each scorecard perspective. For each performance measure it must be clear what the key performance indicator is, and how each is achieved. Building the strategy map involves the following steps:

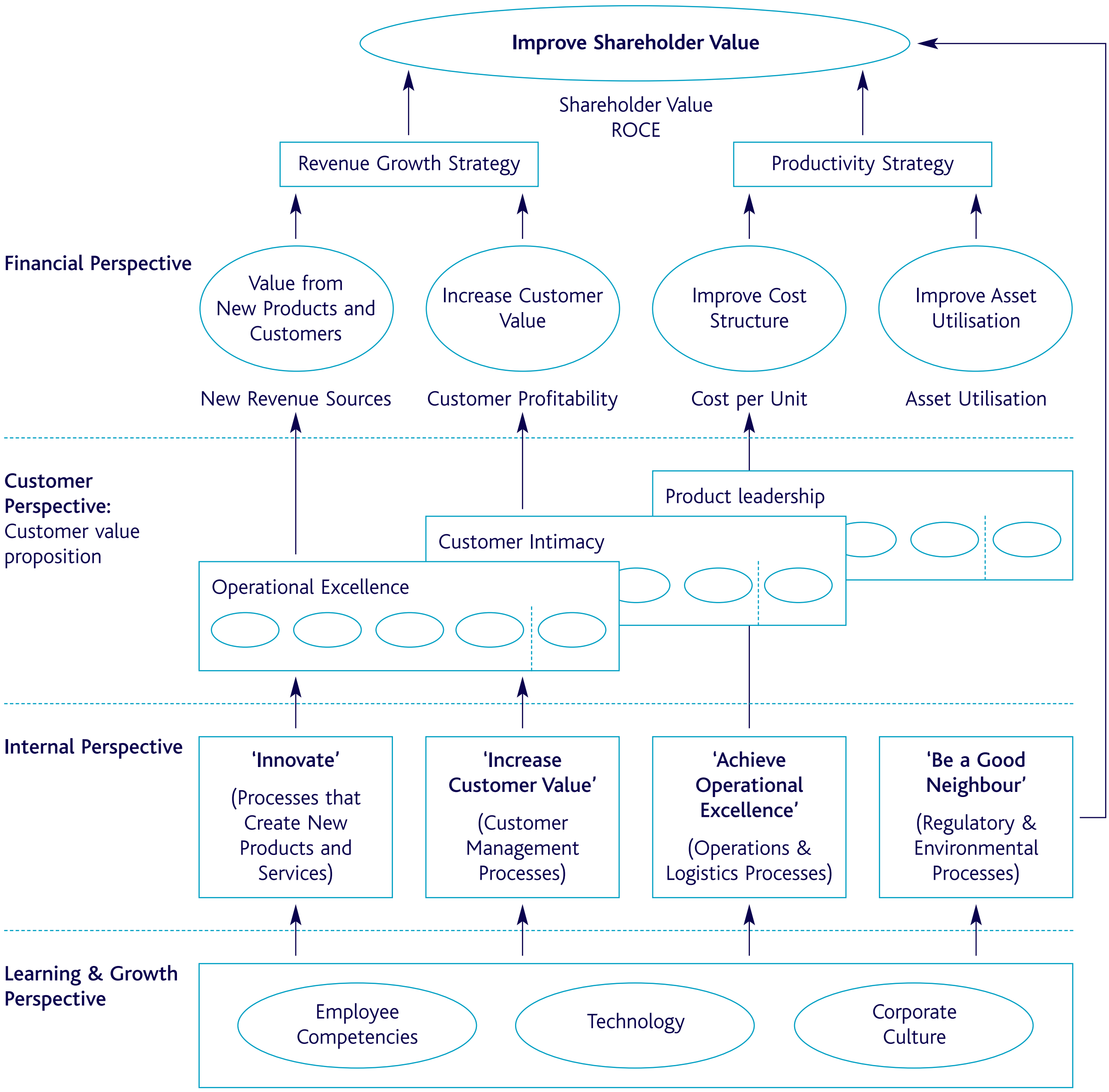
1. Clarifying the mission and strategic vision.
2. Specifying objectives in the scorecard areas necessary to realise this vision.

The over-riding contribution of the third-generation scorecard rests in the clarification and expression of the links between performance drivers and their impact on progress towards strategic success, conveyed through the strategy-mapping process.

Simply, a strategy map charts the impacts of activities. Once maps have been constructed, linking actions and their impacts, operations can be managed to achieve desired outcomes.

From the example of a strategy map opposite, it can be seen that the organisation's mission is to improve shareholder value, and that this is achieved through the revenue growth and productivity strategies – objectives of the financial perspective.

Strategy map example



source: Adapted from Kaplan and Norton, (2000) The strategy map shows increased customer value and the value delivered from new goods and services to be the key drivers of increased shareholder value.

These are driven by achieving operational excellence, customer intimacy and product leadership. These are customer-perspective related measures, and progress towards their achievement might be measured through devices such as customer surveys/feedback, falls in numbers of complaints and dissatisfied customers/returned goods.

Operational excellence, customer intimacy and product leadership are all driven by initiatives identified in the internal-processes perspective: innovate, increase customer value, achieve operational excellence and be a good neighbour. Thus it might be expected that the organisation:

- Invests in increased R&D expenditure (supporting the innovation initiative);
- Enhances the performance dimensions of existing offerings (to increase customer value);
- Reassesses internal logistics of production and delivery; and
- Monitors the environmental impacts of activities (supporting the 'good neighbour initiative').

The above activities and changes are all achieved through appropriate deployment and effective utilisation of the learning and growth perspective constituents – employee competencies, technology and the corporate culture.

1.2.2 Decision support

In a presentation to CIMA's Strategic Enterprise Management Round Table in 2003, the Inland Revenue identified the balanced scorecard as a good framework for a decision-support tool at board level. A process of strategy mapping with executives and senior management was used to understand the existing business model and create an iterative process of change. This was seen as the best way forward for developing the organisation's direction in the light of a changing environment where new management responsibilities and expectations were emerging.

The Inland Revenue found that the process:

- Ensured shared goals and objectives;
- Brought a strategy and its drivers to life;
- Focused the organisation on delivering value for customers and other stakeholders; and
- Enabled less, but more relevant, information to reach the board to facilitate strategic decision-making.

The result of this project has been a better shared understanding by the board and senior managers of how the business works. Value trees have been created that link systematically the operating elements of the business to value creation. Ultimately, this facilitates a better dialogue with stakeholders, such as HM Treasury, on resource-allocation issues.

1.3 Effective scorecard design

The process of understanding the business model and identifying both performance drivers and appropriate measures is complex. There is often confusion, for instance, around assumed logical, rather than actual, causal relationships between drivers of performance and hence performance measures. It may seem logical to assume causality between reported customer-service satisfaction levels and financial results. However, the two are not necessarily congruent: customer-service satisfaction levels within the budget airline industry may be significantly lower than those of full-service carriers, although the comparative financial performance of the former is markedly better.

Further advice concerning scorecard design and the selection of appropriate performance measures was offered by Professor David Larcker in his presentation, as CIMA's visiting professor (2004).
The presentation is available at:
www.cimaglobal.com

To be predictive, rather than simply backward looking, the balanced scorecard approach should focus on those activities and processes that an organisation needs to get right to ensure it fulfils its strategy. The significance of this task cannot be underestimated. The lack of a cause and effect relationship between drivers of performance and indicators, perhaps from invalid assumptions of the business model, will lead to adverse organisational behaviour and performance.

In designing a scorecard, there is a need to challenge and discuss the generic four perspectives of the balanced scorecard that preoccupy managers regularly. In the public sector particularly, scorecard design can be refined with perspectives that are more meaningful and as is illustrated in chapter three, visualising value drivers does not need to be undertaken within the context of these perspectives.

To summarise, the Kaplan and Norton view is that strategy scorecards:

- Provide a logical and comprehensive way to describe strategy;
- Communicate clearly the organisation's desired outcomes and its hypotheses about how these outcomes can be achieved; and
- Enable all organisational units to understand the strategy and identify how they can contribute by becoming aligned to the strategy.

Getting the 'balance' right

The correct 'balance' that a scorecard encompasses should be driven by – and reflect – the value proposition (product leadership, customer intimacy or operational excellence) on which the strategy is based. To be most effective, scorecards of 'customer intimates' should emphasise measures in the customer perspective; product leaders should emphasise those in the innovation and growth perspective; and those pursuing technical excellence should focus more on the internal business-processes perspective.

Olson and Slater (2002) have tested this approach. Their research findings showed that 'superior' performance can indeed be facilitated by manipulation of performance emphasis, i.e. scorecard design, irrespective of:

- The value proposition on which the strategy is based; and
- The characteristics exhibited in addressing the product/market strategy decisions.

Of all the firms participating in Olson and Slater's study, irrespective of their product/market response position, 'higher performers' placed greater emphasis on measures included in the financial perspective than did lower performers. Interestingly, for operators classified as 'low-cost defenders' those that performed better placed less emphasis on customer-related performance measures than did the lower performers.

Recent research suggests that the way forward for managers, is to focus explicitly on how goals, strategies and operations are connected, and to try to understand the interdependencies across the value chain.

Chenhall categorised an index of integration over a number of dimensions including:

- Operations/strategy: integrated operational actions with organisational strategies;
- Different internal units: integrated objectives of different business units within the organisation;
- Internal/external: make transparent the interrelationships between the activities of different business units and external suppliers and customers;
- Financial/non-financial: provide information on financial, customer-related, business-process related, and long-term innovation related performance; and
- Time: integrate current actions with past and future consequences by using leading and lag indicators.

If we accept that organisations create value through their superior co-ordination and integration, identifying what it is exactly that a balanced scorecard integrates seems very useful. What matters most for the individual company, however, is on which dimension of integration to concentrate. Manufacturers that compete on product quality might, for example, emphasise the integration of internal and external units. Their balanced scorecards would need to highlight measures of co-operative product design, speed and reliability of deliveries and logistics efficiencies, for example.

By contrast, organisations in a strategic turnaround situation might need to emphasise the integration between the operations in local units with overall corporate strategy. Performance measurement systems can support such change programmes by highlighting the extent of integration between operations and strategy.

The bottom line is that a good scorecard will reveal an organisation's strategy and paint a picture that the traditional focus on financial measures is unable to do.

2. Implementation and practicalities

2.1 Kaplan and Norton's five guiding principles

In their original exposition of the 'strategy-focused' scorecard Kaplan and Norton identified the five 'key principles' to successful development and implementation of a strategic scorecard, outlined below.

2.1.1 Translate strategy into operational terms

The balanced scorecard is not a strategy-formulation tool. Strategy formulation may be viewed as an art, although the description of strategy, (through the balanced scorecard), is not. For organisational performance to be of a value exceeding that of the sum of its parts (the composite business/organisational units and departments), the activities of each must be linked, and mutually re-enforcing, via the organisational strategy. (Chapter three outlines variations on Kaplan and Norton's strategy-mapping theme used to translate the strategy from a notional concept into a schedule of actions and key performance measures: an organisational plan).

Strategic themes and priorities must be embedded within reporting structures to enable a consistent message and set of corporate strategic priorities to permeate each part of the organisation.

In some cases, for example within the UK National Health Service, or the financial services industry, where reporting structures are required for regulatory requirement compliance, it may be necessary to add a supplementary reporting structure. In other circumstances, a new reporting structure that addresses the balanced scorecard themes and priorities may simply replace the existing performance reporting structure.

2.1.2 Align the organisation to the strategy

Kaplan and Norton's work shows that the common thread to the successful implementation of the balanced scorecard lies in companies' ability to realise consistent strategic alignment and focus. An organisation might best achieve focus by developing and communicating a number of strategic themes. Corporate or organisational strategy generally encompasses two or three complementary and mutually supportive strategic themes that allow organisations to balance and focus potentially conflicting long- and short-term priorities.

The strategic themes:

- Reflect what must be done internally to achieve identified strategic outcomes; and
- Provide a way of segmenting the strategy into several general categories, or projects.

Typically, strategic themes relate to internal business processes, and each acts as a 'pillar' supporting the over-arching corporate strategy. Each theme contains its own strategic hypothesis, its own set of cause-and-effect relationships and occasionally its own scorecard. It is frequently the case that organisations overload themselves with too many initiatives and projects. This leads to a dilution of focus on the high-value-at-stake issues. In many large organisations, the balanced scorecard is developed first at corporate level to articulate a company's vision, and how it will be delivered. Kaplan and Norton suggest that the corporate scorecard can clarify two elements of corporate-level strategy:

- Corporate themes – the values, ideas and beliefs shared throughout the company; and
- Corporate roles – the actions that create synergy and value at business-unit level.

From this corporate scorecard, the strategic contribution of the supporting business units/divisions is clarified, and scorecards which are consistent with, and reinforce the corporate level scorecard, can be developed for each. The framework allows the continued communication of strategy throughout the organisation. Scorecards developed at corporate level can be deployed throughout departments and divisions, and may prompt such units clearly to define their contribution to overall strategy execution.

Thus begins a communication process from division or department level to corporate head, facilitating refinement of strategy and strategy management plans throughout the organisation. In reality, this is often a process of negotiation and discussion until objectives and priorities are agreed.

According to Kaplan and Norton's research, organisations such as Mobil Oil have used this approach in developing scorecards for the 18 business units of its North America Marketing and Retailing division. It should be noted, however, that the translation of values into desired behaviours is not a straightforward process. It requires that all the drivers of employees' behaviour – including performance measurements and rewards, available technology, structure, people skills, and organisational culture and processes – are influenced.

Where organisations are also realising the value of partnership working – and boundaries between organisations are becoming increasingly fluid (as shown by an increase in partnership arrangements, joint ventures and outsourcing) – scorecards can be developed to define how value will be created within the external partnerships. In such circumstances, contracts between organisations may be based around joint, strategy-driven, balanced scorecard metrics.

2.1.3 Make strategy everyone's job
For the balanced scorecard to be fully effective as a strategic and communication tool, it is imperative that all employees understand the strategy and conduct their business in a way that contributes to its mission and objectives.

Where higher-level scorecards are 'cascaded' to lower-level departmental – and even where individual scorecards are used – employees must 'buy in' to the organisational strategy for effective implementation. In the majority of cases, where due diligence has been observed in cascading a corporate scorecard to departmental or project-team level, the value of the scorecard as a tool for ensuring strategy is executed is optimised. It may be valuable to cascade the scorecard down to individual level so that each employee has a personalised scorecard which could then be used as the basis of their performance appraisal. This way they can track their own personal contribution to departmental and divisional objectives, and ultimately to the achievement of corporate goals, strategy and mission.

Kaplan and Norton cite three processes as vital in aligning employees to the strategy:

- Communication and education;
- Developing personal and team objectives; and
- Incentives and reward systems linking performance and reward.

Launching a strategy
To launch a strategy requires:

- Education (strategy awareness);
- Testing that employees understand the strategy (strategy mind share);
- Checking that employees believe the strategy is being followed (strategy loyalty); and
- Determining how many employees are teaching others about it (promoting the concept and engagement of strategic 'missionaries').

Careful thought should be given to how the scorecard is rolled out throughout the organisation. Kaplan and Norton recommend the use of meetings, brochures, newsletters, education programmes and the intranet, to promote the scorecard approach among employees.

To be of lasting impact, however, the actual methods used must be consistent with the organisation's culture. While there may be some value in 'handing out' strategy from corporate to departmental level and expecting the required degree of compliance from employees, in practice this approach may prove too simplistic and detached to be effective. Ownership of strategy can be better fostered where appropriate managers and perhaps front-line staff are involved through workshops in identifying key performance drivers and the important activities and processes needed to support these.

Some researchers and consultants have recommended that organisations might benefit from working with local groups of staff to decide how a customised and compatible scorecard, which takes account of local circumstances, might be developed and implemented. This approach can follow the communication of the identified and agreed key strategic goals that underpin the corporate scorecard (see the case study on Health Action Zones).

Embedding strategic objectives throughout the organisation
Good timely communication with employees is crucial to the success of any change process. Organisations can use a diverse range of communication activities to embed the strategic objectives of the corporate scorecard into personal and team objectives. Some alternative approaches suggested by Kaplan and Norton include:

- **The 'super-bowl' approach:**
  A high-level team sets corporate targets drawn from different scorecard perspectives, and explains to all employees their role in hitting the targets; if the targets are met, employees can be rewarded through performance-related pay.

- **Alignment with strategic initiatives approach:**
  Scorecard measures that link day jobs to programmes or projects are developed; a work team takes ownership for one or more specific projects or programmes and a tool, such as a one-page report for each project, is developed.
  The report should outline:
  - The balanced scorecard objectives and measures that the project has an impact on;
  - The actions required to implement the project;
  - Desired project outcomes;
  - The responsible managers;
  - The critical success factors; and
  - Project-specific performance measures.

  The report delineates clearly the responsibilities of frontline workers and can enhance motivation of the frontline team by mapping their day-to-day activities to higher-level business unit and corporate objectives. However this does not necessarily promote innovation and may constrain cross-functional activities.

- **Integration with existing planning and quality processes approach:**
  Integral to the introduction of quality management initiatives, for example Total Quality Management, Malcolm Baldridge award focused programmes, is the identification of metrics which track progress in a 'management by objectives' environment.

  For organisations already implementing such quality management initiatives, the key performance targets developed for balanced scorecard implementation should be consistent, at least in part, with the quality-related measures.

  In this way, regional, business unit and corporate scorecards that are consistent with and reinforce existing quality initiatives can be installed.

- **Integration with human resources processes approach:**
  Using strategic themes, companies can roll out a balanced scorecard approach by establishing links from financial objectives to objectives in the other three scorecard perspectives. Measures can be linked to specific employee development and change programmes.

- **Personal balanced scorecard approach:**
  The corporate scorecard is cascaded down, first to business-unit level, where corporate goals are translated into business-unit level goals, and from there to personal performance objectives. This approach gives employees the facility to develop their performance objectives based on a clear understanding of corporate and business unit objectives.

Although by no means exclusive or prescriptive, some organisations have found the following simple rules helpful in developing personal balanced scorecards:

- Do not exceed 15 measures;
- Individual scorecards should support supervisor or team scorecards;
- Include measures relating to a mix of lag and lead indicators;
- Supervisor/manager scorecards might usefully include an objective and measure relating to coaching/employee development;
- Scorecards must include an objective/measure that supports another part of the business; and
- Both supervisor and employee must agree to any change to the scorecard.

Personal scorecards can be a useful tool in the incentive and reward programme, by linking reward to the attainment of an agreed performance target. This fulfils two functions:

- It focuses employee attention on the activities and measures most critical to achieving organisational strategy; and
- It provides extrinsic motivation by rewarding employees when they, and the organisation succeed in reaching targets.

It should be noted that the practice of relating employee appraisals, and even reward, to personalised scorecards is not without its limitations. Where a dynamic scorecard is implemented, risky strategic choices may become less attractive, and there may be internal resistance to granting employees the required freedom to modify their performance targets and objectives.

In some circumstances however, where the scorecard approach and culture is well established, companies may have some success. At Shell, for example, the balanced scorecard approach (first implemented in 1996) has evolved into a robust framework that now forms the basis of employee appraisals (see box).

Shell: an example from practice

Recognition of the potential importance of its intangible performance drivers:

- Customer focused innovation;
- Technology, brand, reach, reputation;
- Talented and diverse pool of employees; and
- Strong business principles and sustainable development

led Shell International to undertake a study aimed at providing a better understanding of how these factors have an impact on future cash flows.

Shell implemented its scorecard in 1996. Since then, the framework has evolved into a robust framework that forms the basis of employees' appraisals (up to 30 per cent of salary is available as a bonus, based on individual scorecard results, and the introduction of new factors to the scorecard is taken very seriously).

Agreement on the intangible value drivers and key success factors is vital. Shell enlisted the help of Cranfield University to bring all performance data together so that apparent relationships between intangible assets and high-level scorecard results could be tested empirically to provide a robust foundation for future analysis.

Much work was, and still is being invested in understanding discretionary behaviour and people's psychological contract with the organisation – whether people were happy with their stakeholder relationships. Using an average of 38 different variables, Cranfield formulated an employee 'happiness' index, which, although just as much a feel-good factor as a scientific link, was central to understanding how employees and the public view the organisation.

Implementing the index at Shell has had longer-term repercussions – leadership credibility was viewed as an important variable in the hierarchy of employees' value drivers, leading to an investment in high-quality leadership training for managers. This in turn contributed to Shell's high standing in the employment market, helping to secure top-quality graduates and sustain the drive for improved performance.

Reference: CIMA's executive report, *Improving decision making in your organisation,* available from www.cimaglobal.com/sem

2.1.4 Make strategy a continual process – strategy management meetings and the learning process

As operating conditions change continuously, so must the business strategy, and hence a process for strategy management is required. Successful balanced scorecard companies implement a process for strategy management, which integrates the management of tactics, and the management of strategy into a seamless and continual process.

In these organisations, the role of the budget may change. Budgets can be an inflexible tool for managing operations, however few organisations have any tool at all for managing strategic progress. For organisations using a balanced scorecard, this may be used as the link between operations and strategy.

In managing and controlling operations, the budget defines both resources allocated to business unit operations, and the associated performance targets.

Three themes emerge in the implementation of a learning process. First, strategy is linked to the budgeting process, and spending decisions are analysed for their strategic impact. Such analysis has lead some companies to operate two kinds of budget:

- An operational budget which functions as a management tool to guide the day-to-day expenditure necessary to run the business; and
- A strategic budget which protects long-term strategic initiatives from the pressures of short-term financial performance.

The second behavioural change to accompany the strategic management process is the introduction of management meetings to review strategy and facilitate wider involvement in scorecard issues. Some companies have taken this information-sharing initiative as far as open reporting, so that performance results are available to everyone in the organisation.

Finally, in taking steps to make strategy a continual learning process, the balanced scorecard is based on the cause and effect linkages between individual/departmental/business units actions. Once the scorecard is put into action, and feedback processes report progress, the hypotheses on which such cause and effect linkages are based can be tested, either statistically or qualitatively.

The scorecard operates by monitoring and measuring actions and the impact that they have, and by allowing managers to manage assets used to deliver value to identified stakeholders. An effective scorecard design must therefore reflect the contribution of these assets by generating appropriate performance indicators.

If the strategy is inappropriate or invalidated due to changing market conditions, a balanced scorecard approach, if implemented in the right way, should allow for organisational learning. This means that the inherent performance measurement system is providing appropriate information to help management to challenge its existing assumptions of the business model.

Strategy management meetings
The agendas of business management meetings are concerned, generally, with the reporting and control of the organisation's operational activity. Although this is necessary, it is unlikely to be sufficient to secure the performance improvements often promised by implementation of the 'strategic' balanced scorecard.

Strategy management meetings, focusing directly on the impact and effective implementation of the strategy itself, should align with the new 'strategy focused' culture that Kaplan and Norton espouse. They should focus on strategic issues, and the value of teamwork and organisational strategic learning, to improve the management of strategy, rather than operational tactics.

Where the practice of reporting by exception is adopted, the balanced scorecard can function as a useful agenda for strategic management meetings. Managers' time is limited and using the scorecard to focus attention on those activities where targets are not being met, is a time-efficient way of steering and managing strategy implementation. (More information regarding good performance reporting and reporting by exception is available in *'Performance reporting for boards'*, available from CIMA's website: www.cimaglobal.com).

To be fully effective, the meetings require honest feedback, commitment, and a culture of supportive teamwork. The balanced scorecard's role in fostering a common view of the business model should help this. Organisations also need to ensure that their strategies are still valid. Continuous learning enables management to scrutinise the fundamental assumptions on which strategy is to be founded. However, this approach is not a tool that should be used in isolation to facilitate 'out-of-the box' thinking. Other approaches, such as scenario planning, can be used effectively to identify the possible drivers of change in the industry and the wider macro environment.

Basic management tools, such as reports of actual performance against budgeted performance, and variance analysis, are useful for the management and control of strategy implementation, and may help executives to determine a course of action that will help the organisation to get back on track. However, traditionally, these tools use only financial metrics, and, more importantly, do not challenge existing assumptions about the performance measure, target, and current strategy for achieving the target.

Even where a culture of teamwork and problem solving is fostered, the value of a 'single-loop' control system, which operates only within the context of the existing strategy, is obviously limited. By using a balanced scorecard as the agenda for strategy management meetings, and exceptional reporting, investigation and remedying of anomalous performance results, the underlying causal links and ultimately the validity of current strategy can be considered.

Some commentators argue that a strategic management system is a communication rather than control system. Its concerns are not with absolute accuracy of reams of financial data, but with clear, concise and readily understood information about progress towards the achievement of strategy-related targets and strategic projects and initiatives.

Different organisations have developed different ways of communicating the information necessary for effective strategic performance reporting. Using a balanced scorecard, many have found that the voluminous reports of countless measures previously circulated have become redundant, and concentrate instead on using simple 'at a glance' indicators which quickly convey pertinent information regarding the progress of existing initiatives. Although organisations need to ensure that the appropriate data required for compliance reporting is being collected, using a balanced scorecard approach means that the entirety of the compliance-driven data is not necessarily included in strategic reporting.

A popular example is the traffic light/RAG system, where project progress may be reported thus:

Red: the initiative is off-track, with no plan or no agreement.
Amber: the initiative is off-track, but there is an agreed, resourced recovery plan in place.
Green: the initiative is on track to deliver objective.

This system can be further modified, to communicate additional/other information, for example:

Blue: progress information overdue.
Black: progress information not yet due.

In implementing its balanced scorecard, Morrison Construction used a golfing analogy as a framework for the 18 key measures that it identified as key to its success.

Each measure (or hole) was given a 'par' value, and the company scored and communicated its performance according to its score for each 'hole'.

Computerised performance-reporting and management systems can be developed and configured specifically to facilitate predictive analysis of performance against scorecard targets, and to alert organisations to unexpected deviations from expected performance outcomes. Further information regarding such systems is available in chapter five.

Sustaining the value of the scorecard investment – reviewing causal modelling over time

A frequent error in scorecard adoption, is to pursue an organisation-wide exercise involving strong executive leadership and wider involvement through workshops to build a causal model of the business, and then stop the process. Once developed, adopted and fully integrated into the organisation, the scorecard arguably facilitates improved performance at the front-line. Furthermore, regular review of performance levels and performance metrics is vital overtime.

Evaluating results and testing the way people think about the business should be regular. Over time an organisation will gain a deep understanding of its value drivers. Consequently, both the value and nature of the selected performance measures need to be reviewed frequently, at the very least through the planning and forecasting/budgeting process.

Testing and adapting strategy

There is little point in achieving performance targets that underpin a faulty strategy. Appropriate actions that ensure the validity of the current strategy that underpins the scorecard, can be implemented. These include: analytic methods – hypothesis testing and dynamic simulation.

Dynamic simulation modelling is an established methodology that can be applied to inform strategic thinking. Statistical analysis can be helpful in testing the hypotheses supporting the causal links in the strategy maps. In theory, and for those prepared to commit the necessary financial and employee or IT resources, statistical (factor or cluster) analysis may be used to test assumed relationships between actions. For example, improvements in the workplace (a learning and growth/internal processes perspective action) and their impact on financial measures (a financial perspective impact), via improvements in the shopping experience (a customer perspective impact).

As for any performance management tools, a study of relevant collected statistics can be used to produce a time-series analysis of collected balanced scorecard information. This facilitates quantitative estimation of the magnitude and time-lags of linkages between measures.

This has two benefits:

- It helps to forecast the future value creation impact trajectory of strategic alternatives before committing resources to new investments and initiatives; and

- It makes explicit the key operational drivers of value creation, and facilitates an understanding of interdependencies among strategic resources and the business unit's strategic objectives.

It is worth noting however, that while this may look like a good idea in theory, the statistical testing of causal links may in practice prove uneconomic due to:

- The required investment in IT and staff resources;
- The lack of availability of, and time lag between, required statistics (particularly for 'woolly' strategic measures of indicators such as workplace improvement perceptions); and
- The tenuous nature of any measure.

The key question is: 'how much scientific basis is required to know that a particular performance driver is key to generating shareholder or stakeholder value and therefore one which the organisation needs to get right?'

In answering this question, it is critical to consider the scalability of lead indicators. Although customer satisfaction may drive sales and profits, a doubling of customer satisfaction ratings may not lead to a doubling in profits. An appropriate question to ask may be: 'how much customer satisfaction should the organisation be seeking to deliver?'

Other anticipated causal links with an impact on strategy realisation may relate to intangible performance drivers and outcomes, such as the trade-off between two intangible assets: e.g. product innovation and customer satisfaction.

These are not questions with easy answers and academic research has not proved that causality can be numerically solved, particularly for longer time scales. In the complexity of a large organisation, it can also be a challenge to split out cost drivers from revenue drivers and model the business in a way that it is fully understood when a 'lever' is pulled. It is therefore important to consider the objective of an initiative underlying a strategy and to analyse both its impact on revenue and cost. For example, a price promotion will affect store traffic and will therefore have an impact on both cost and revenue.

2.1.5 Mobilise change through executive leadership

A pre-requisite for the success of a scorecard programme, or indeed any other performance measurement framework, is the absolute and explicit commitment of management at the most senior level (see box, below).

However, even where such commitment is secured, and despite expending considerable effort and resource, not all organisations have been successful in developing and deploying a balanced scorecard approach.

Mobilising change through executive leadership

A balanced scorecard programme is not just about metrics, it is about large-scale change. The most important condition for its successful implementation is demonstrated ownership and active involvement of senior executives.

The balanced scorecard is often most effective when used as part of a major organisational or culture-change process (see the case study on BAE Systems). Although scorecard projects can be launched from different organisational units, the most important criterion for success is that the initiating unit has a senior executive whose leadership and management style emphasises:

- Communication;
- Participation;
- Employee initiative; and
- Involvement.

The process to initiate a balanced scorecard, as with any other change programme, begins with the leader creating a sense of urgency for change, which may arise from the need to:

- Reverse recent under-performance; and
- Respond to changes in the operating environment.

The commitment of senior management is needed in three distinct phases of the change:

- To launch the change process (mobilisation);
- To establish team-based approaches to deal with transition to the new performance model (governance); and
- To create and modify the strategic management system.

Adopting the new measurement and management system of the balanced scorecard helps organisational leaders to:

- Communicate the vision for change; and
- Empower business units and individual employees to devise new ways of doing their day-to-day jobs to help the organisation achieve strategic objectives.

By focusing and aligning resources and activities on the strategy required for achieving an organisation's mission, the balanced scorecard helps organisations to mobilise for change. Where employees can see the linkages, integration and initiatives encompassed in the balanced scorecard, they are more willing to commit to stretch performance targets.

3. Beyond Kaplan and Norton – alternative and complementary approaches

3.1 Strategy mapping

While there is wide agreement on the need to understand how tangible and intangible assets interact to drive the business model and performance, there are differences of opinion on how best to achieve this. It is important to understand the basis and contribution of alternative approaches so as not to be confused by terminology.

3.1.1 The Value Chain Map

(Bernard Marr et al., Cranfield School of Management)

This approach builds on the strategy map as a tool to represent visually how intangibles drive tangible value. It was developed to address questions such as: What are our most important intangibles? How do they help us deliver better performance? Critically, there is the understanding that:

- It is not the stock (the simple possession) of organisational assets that delivers value but the deployment and configuration of such assets (tangible and intangible);
- Organisational assets are interdependent and cannot create value on their own – a strong brand for example is worth less without the supporting processes to produce good quality products or services; the latest technology requires the complementary knowledge to operate it; and best production capabilities are worth little without a good distribution network; and
- Not all assets are of equal importance in the value-creation process. Marr (2004) et al address the issue of how best to understand and visualise the causal dynamics inherent in organisational value creation. This can then guide decision-making and resource allocation.

Strategic importance of intangible assets

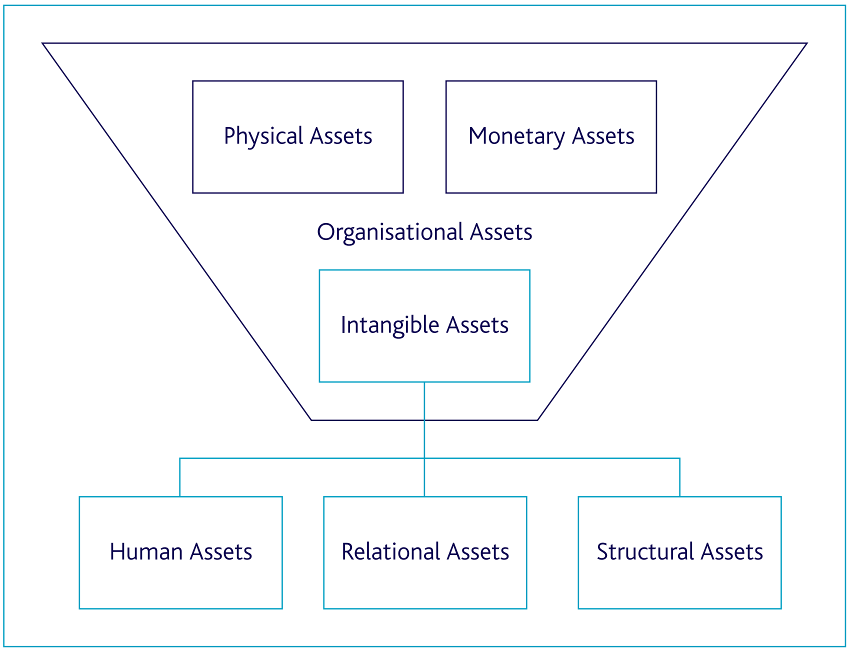
Organisations realise that it is their intangible assets (together with tangibles) that create distinctive organisational capabilities, which in turn are the basis for a competitive advantage. It is no longer sufficient to just identify the competitive forces, opportunities, and threats of the industry. In addition, organisations have to understand their corporate competence and resource composition in order to evaluate these opportunities. Different firms develop different distinctive competencies and the question they have to ask themselves is: do we have the right competence to pursue certain opportunities?

Competence-based competition was first framed by Edith Penrose (1959) and then later picked up and enhanced by Birger Wernerfelt, Richard Rumelt, and Jay Barney, who viewed organisations as heterogeneous entities characterised by their unique resource base. This resource base consists increasingly of intangible assets. This means that the intangible assets of a firm should be one of the central considerations in formulating strategy and one of the primary constants upon which a firm can establish its identity and frame its strategy.

In summary, it is the interaction between resources (tangible or intangible) that drive capability differentials, which in turn drive competitive advantage. This is why organisations need to bring intangible resources and core competencies into their strategic thinking.

Figure 1 shows the breakdown of organisational assets into physical, monetary, and intangible assets. Intangible assets are then subdivided into human, relational, and structural assets. Below, each of the intangible assets categories is described in further detail.

Figure 1: Organisational assets



For the purpose of this report, intangible assets are defined as those key value drivers that do not have a physical presence and are based on intelligence or emotions. They may be analysed as:

- Human assets: skills, competence, commitment, motivation, loyalty of employees, technical expertise, problem-solving capabilities, creativity, education, attitude, entrepreneurial spirit;

- Relationship assets: relationships with stakeholders, licensing agreements, partnering agreements, contracts, distribution arrangements, customer loyalty, brand image; and

- Structural assets: all intangibles that stay with the organisation – corporate culture, routines and practices, virtual networks, tacit rules, intellectual property – patents, copyrights, trademarks, brands, registered designs, trade secrets and processes whose ownership is granted by law.

The dynamic nature of intangible assets
It is not the stock of assets (tangible or intangible) that deliver value, rather it is the deployment, configuration and interactions between these assets, and the transformation process from inputs into outputs/offerings that is key.

The process of identifying and mapping value creation in firms is relatively straightforward. In essence, the following questions must be addressed:

- What are the most valuable resources that enable the firm to deliver value?
- How do these resources depend on each other and interact dynamically to deliver value?

The example below is based on the experiences of an on-line retailer.

Step 1:
Identify key resource stock, by linking internal competencies with external opportunities;

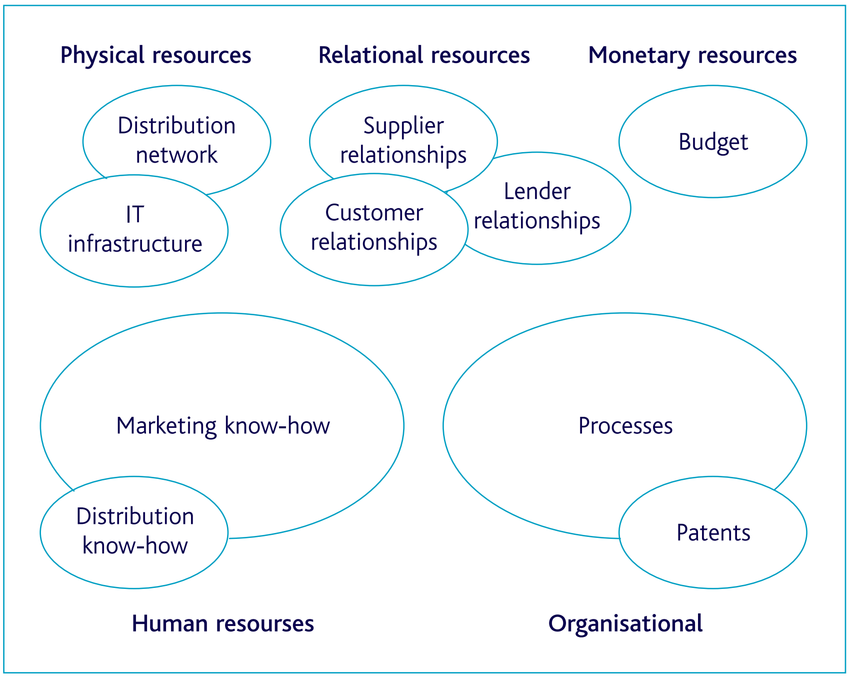
This can be done using either a top-down approach (appropriate for organisations with a clear strategic intent, who should ask what key resources are needed to deliver strategy), or a bottom-up approach (more appropriate for organisations that have a more diversified strategy, who should consider what resources they have and what the organisation does well).

Step 2:
Arrange a workshop of senior management to:

- Identify the organisation's key resource stock, based on pre-prepared lists; and
- Identify and rank the key resources in order of importance, prepared by each participant.

The workshop is used to consolidate the different views into one document. The outcome of the workshop is a map of the key resources and their relative importance.
An example map of key resources, based on the experiences of an online retailer, is given below (figure 2).

Figure 2: Organisational key resource map

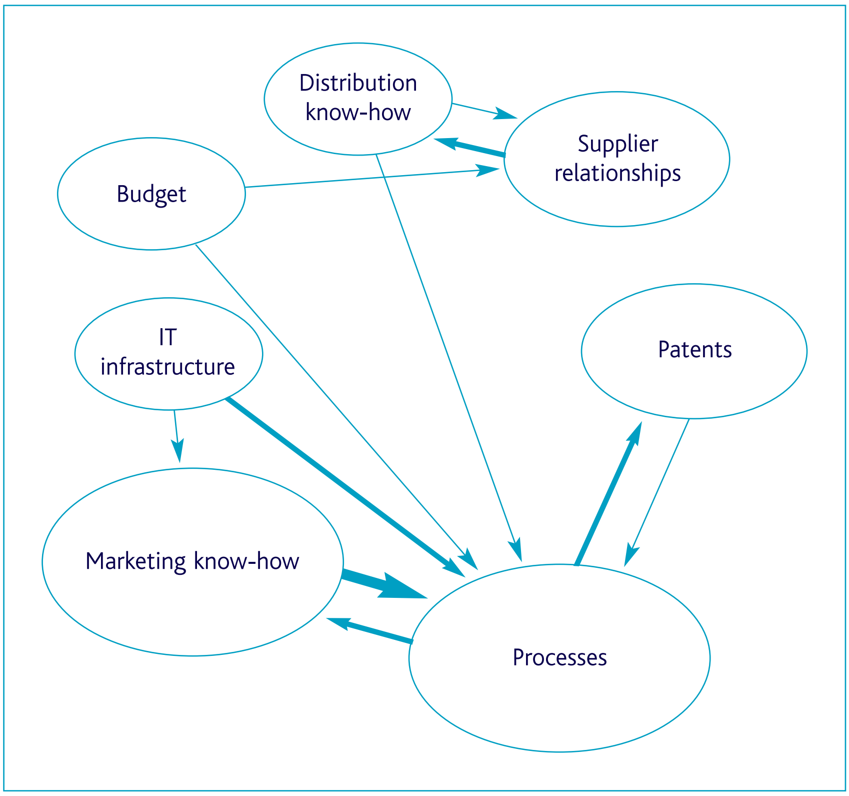


source: Marr, B. (2004)

Step 3:
The map of the key resource stock is given to all workshop participants, plus a matrix containing the same resources in rows and columns. Participants then each complete the matrix, rating the influence of all resources on each other, until all combinations are complete.

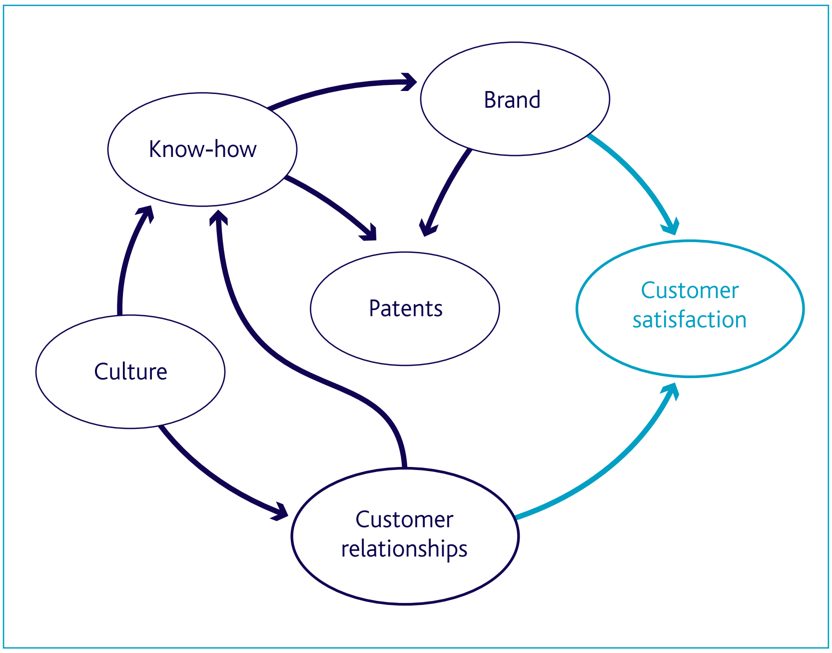
Step 4:
From the completed matrices, the facilitator compiles a map, termed a Navigator (Guta and Roos, 2001, Neely et al. 2003), or Value Creation Map (Marr et al, 2004) of resource stocks and flows. An example map of resource stocks and flows is included (figure 3).

Figure 3: Map of the resource stock and flows
Organisational resources interactions



source: Marr, B. (2004)

Figure 4: An example value creation map



source: Marr et al, (2003)

The Value Creation Map approach offers the freedom to depart from the four perspectives of the balanced scorecard framework and start from a blank sheet of paper in order to reflect the idiosyncratic nature of each firm. For instance, where improvement of the conformity of the prototype with the product design is a key value driver of new product development, there will be a series of indirect dependencies behind this occurring such as codifying procedures and problem solving capacity. When these have been identified, it is then possible to identify priorities and management actions.

Figure 4 is the organisational Value Creation Map based on the identified direct and indirect performance drivers.

The Value Creation Map was developed to complement Kaplan and Norton's original strategy map. Its developers suggest that the processes followed in its configuration ensure consensus among managers that the representation is correct and bias is limited, and propose that further useful steps would be to:

- Integrate the map with the performance measurement system; and
- Test empirically the assumption using performance indicators.

Unlike the traditional strategy map, this approach identifies both the direct and indirect dependencies of performance as well as differences in importance. Understanding the relative importance of specific assets in the creation of capabilities and value enables better resource-allocation decisions.

3.1.2 The Value Dynamics Framework

(Peter Brewer, Associate Professor, Department of Accountancy, Miami University, Oxford, Ohio)

In an article that won the International Federation of Accounting (IFAC)'s Professional Accountants in Business 2003 Article of Merit award, and published in Strategic Management Accounting, Peter Brewer introduced the Value Dynamics Framework (VDF). This is as a tool that can help companies to bridge the gap between strategy statements and balanced scorecard implementation.

The VDF recognises five asset classifications (physical assets, customer assets, organisational assets, financial assets and employee/supplier assets), and recognises inherently the increasing importance of intangible assets. Thus the value creation capabilities of organisational, customer and employee/supplier intangible assets are brought into the scorecard framework, through Brewer's four-step model:

- Create a list of assets used to execute strategy and differentiate organisation from competitors;
- Clarify relationships between VDF identified assets, explaining how they interrelate to deliver customer value;
- Identify strengths, weaknesses, opportunities and threats underlying the VDF; and
- Define the critical success factors underlying the company strategy, and identify particular combinations of assets as being supportive of each critical success factor.

It is argued that using the VDF and this four-step process helps organisations to focus their balance scorecard metric selection process on the assets and critical success factors most important to achieving strategic goals.

(A summary of the VDF adopted at Dell is included at appendix one).

3.2 Scorecard implementation

Kaplan and Norton's five guiding principles together form a useful construct supporting scorecard implementation. An interesting alternative is offered in Peter Brewer's Business Modelling Approach, outlined below.

3.2.1 The Business Modelling Approach

Causal links are again key to the scorecard development and implementation process, but business modelling involves a 13-step programme with a three-phase implementation programme:

Phase one:
Characterise the business model as a process, by identifying:

- The customer value proposition offered;
- Key (product/service) outputs that enable delivery of the value proposition;
- The processes required to support provision of these outputs;
- The critical inputs that allow the processes to function optimally; and
- The suppliers that provide the inputs that enable processes to function optimally.

Phase two:
'Map' the specific customer value propositions and product/service outputs that drive the attainment of specified financial goals;

Phase three:
Select internal business process measures.

The 13 steps:

1	define financial goals;
2	define customer;
3	define outputs;
4	define processes;
5	define inputs
6	define suppliers;
7-9	prepare 'if – then' matrices (the hypotheses that underlie the business model) for financial drivers, customer value drivers and process drivers (see appendix two); and
10-13	select balanced scorecard measures, for each scorecard perspective.

The business modelling approach claims three strengths:

- It offers a lock-step methodology to guide the balanced scorecard formulation process;
- It adds rigour to the process of linking organisational strategy to the balanced scorecard since the first nine steps of the business modelling approach must be completed before any measures can be selected. This means that the organisation must crystallise its strategic vision into a process-oriented business model, linked together through 'if-then' hypothesis statements; and
- By following the questionnaire (shown in appendix three), coupled with the 'if-then' matrices, it provides organisations with the tools needed to ensure that all members of the management team have an opportunity to provide input into the balanced scorecard formulation process.

4. Dimensions of scorecard application

Part of the value of the balanced scorecard as an effective tool for strategic management lies in the versatility of the framework, which may be adapted according to organisational needs. Accordingly, a balanced scorecard approach can be adopted by organisations in the public and not-for-profit sectors. However, following a mechanistic scorecard template, without understanding the organisation's key strategic/value drivers is unlikely to help realise desired activities and behaviours.

4.1 The balanced scorecard in the public sector

According to the original scorecard architecture, the strategy map places the four perspectives in a hierarchy, with the financial perspective at the top. Where profit-maximisation is not the main objective of an organisation, the 'perspective-derived' architecture remains appropriate, although the nature and focus of each constituent perspective is likely to change, to reflect the non-commercial logic of the organisation. Where consideration has been given to the focus of such drivers, the underlying cause and effect relationships can be explored, and an appropriate scorecard developed.

The strategic objectives of not-for-profit organisations are not measurable simply in financial terms, and this can be reflected in a scorecard with a structure and emphasis slightly different from the standard. For example, the 'traditional' perspectives (see chapter one) may be changed, so that the customer/service-user perspective replaces the financial perspective at the top. Alternatively, attention may be focused on achieving the overall objective or mission through all four perspectives, via the development of inter-related strategic themes, and the establishment of targets and theme-based objectives dispersed throughout the organisation.

Critically, however the scorecard is adapted, the cause and effect relationships inherent in activities are key. By deriving multiple and inter-linked strategic 'themes', which underscore the overall strategy, the process of defining lower level operational objectives, measures, targets and initiatives relating to a particular theme (and thus contributing to corporate strategy realisation), is made easier.

For public sector organisations, it may be difficult to define who the 'customers' are. The ultimate customer is generally not the same as the body providing the funding. Public sector organisations have multiple stakeholders (government, service users, funding bodies, other agencies) and it may be appropriate to include objectives for several different groups as part of the 'customer' perspective, before looking at, for example, the internal processes required to meet the objectives of each different group.

A case study based on a health service delivery organisation that has followed this approach is included in Chapter seven.

Research by Dr Philip Barden found that the success of front-line performance improvement in the UK National Health Service (NHS) is linked inextricably to the development of partnerships between policy makers, strategists and front-line staff. What is crucial to the success of the balanced scorecard and other performance improvement initiatives is not the sophistication of such initiatives, but:

- The extent to which they are jointly designed by senior management and front-line staff; and
- The communication styles used in discussing and evaluating performance objectives.

The research findings suggest that front-line staff have a detailed knowledge and understanding of health care delivery that can make a key contribution in specifying the optimal source and extent of performance improvements.

The key contribution of senior management in this performance-improving partnership, arises from their enabling and empowering functions. By:

- Establishing the context;
- Providing resource; and
- Facilitating effective communication,

Senior management realise their most significant contribution to continued and sustained performance management and improvement.

4.2 Embedding a sustainability focus with the balanced scorecard

In its original format, the scorecard is concerned more with strategic success from the owner/shareholder perspective. Some commentators have noted that its apparent disregard for the wider impact of corporate activity on other stakeholders may ultimately weaken the value of the scorecard in the longer term. However, leading institutions like the French business school INSEAD are considering the value of the scorecard as a strategic management framework to re-orientate strategic thinking and integrate sustainability issues in the scorecard design. (see below).

'The value of the balanced scorecard as a tool for integrating sustainability concerns into organisational strategy, and for embedding this throughout the organisation'
(Author, Francesco Zingales, Research Associate, INSEAD).

Our research focused on three large companies – LVHM, EDF and ACEA – for whom sustainability concerns are of strategic significance and impact for identified stakeholder groups.

It was thought that the scorecard approach might be an appropriate integration tool for four main reasons:

- Because of the scorecard's (medium- to long-term) time horizon. This reflects the time horizon through which environmental and social management activities might be expected to create value;
- Because the scorecard approach requires top management to acknowledge implicitly the limitations of relying solely on financial indicators;
- Because the explicit 'cause and effect' analysis of which the scorecard is comprised, fosters the level and breadth of discussion and exchange which are helpful for the full consideration of sustainability issues, which occur along the value-creation chain; and
- Because the scorecard is the focus of a widespread strategy management process which is conducive to intelligent consideration of the strategic value of environmental/social issues.

We were aware of what were considered to be deficiencies in the framework and processes of Kaplan and Norton's balanced scorecard:

- The framework appeared to lack an appropriate mechanism to include risk that went beyond those relating to client needs; and
- The process was insufficiently codified – it did not enumerate principles that would help firms to decide who should be involved in discussions regarding scorecard design, or when and in what form sustainability considerations should be included.

To address these perceived shortcomings we took the decision to:

- Include issues relating explicitly to environmental and social risk in each of the scorecard perspectives; and
- Involve a broad array of people (including environmental/social managers) in a number of steps of the building and running of the balanced scorecard construction and management process.

The two-and-a-half-year research programme resulted in:

- The identification of strategic issues to which environmental and social operations (and therefore managers) might have a key contribution. This was facilitated by the exercise of mapping strategies in terms of cause and effect diagrams;
- Greater collaboration between environmental/social managers and marketing managers, financial controllers and operation managers at the business-unit level; and
- A new set of strategic indicators with an in-built link to environmental/social issues, making the value-creation potential of these activities easier to access in a later stage of the management process.

Information regarding INSEAD's research activities is available at: www.insead.edu/facultyresearch/research/index.htm

5. Software in scorecard development and application

Developments in performance-measurement software have improved the design of strategy maps. These applications have helped to make them a key part of understanding, communicating and reviewing performance. They also allow the user to 'feed' the maps with information about relationships and underlying measures. This enables automation of 'traffic lighting' of performance (green for good performance, amber for medium and red for bad).

As businesses, governments and not-for-profit organisations around the world realise the need to manage their strategy more proactively, many are implementing corporate performance-management systems. Multiple application providers offer a plethora of software solutions and an informed selection is vital, since the software will be instrumental in collecting data, analysing performance and communicating performance information. The wrong decision can result in a significant waste of time, energy and money. It can also undermine the entire balanced scorecard development effort and the credibility of the performance management system that is being implemented.

To help guide companies through the selection process, Bernard Marr of Cranfield University has led research involving more than 80 companies over three years. Using theoretical sampling techniques, data from a range of companies was gathered, with the aim of developing a selection framework applicable across organisation types. Twenty-five senior members of consulting firms, (including Accenture, Cap Gemini, Ernst & Young, KPMG and Gartner) were interviewed. Each had experience of scorecard implementation and software selection. In addition, more than 45 members of software companies specialising in providing balanced scorecard and performance management software were interviewed.

Cranfield's team identified ten points that each organisation should consider when looking for the right software to use with a balanced scorecard:

- Company and product – vendor background and expertise, licence fee, maintenance fees, training and implementation costs;
- Scalability of the programming, how the database works;
- Flexibility and customisation of methodology and approaches;
- Features and functions – security and access control, exception alerting, collaboration and reporting;
- Communication – web-based, commenting, email integration;
- Technical specifications – technical requirements, integration with existing infrastructure and databases;
- User interface/data presentation – information display and strategy maps;
- Analysis functionality – analysis capabilities, statistical functionality, forecasting;
- Service – levels of service, implementation support, technical support; and
- Future – developments and release frequency of the product, future compatibility.

A recent Gartner/Cranfield report evaluates all major performance measurement software applications. More than 30 applications (see below), including products from SAP, Oracle, Peoplesoft and Hyperion, as well as more specialist vendors, are discussed in detail.

Software vendors with solutions to support a balanced scorecard implementation:

Company name	Product name	Internet address
Active Strategy	Active Strategy Enterprise	www.activestrategy.com
Aspireview	Aspiren	www.aspiren.com
Business Objects	Balanced Scorecard Analytic App.	www.businessobjects.com
Cognos	Metrics Manager	www.cognos.com
Corporater	Corporater Balanced Scorecard	www.corporater.com
CorVu	CorStrategy/CorManage	www.corvu.com
EFM Software BV	Bizzscore	www.efmsoftware.com
Ergometrics	Ergometrics	www.ergometrics.com
Hyperion	Hyperion Performance Scorecard	www.hyperion.com
IC Community	Dolphin Navigator System	www.iccommunity.com
IFS	IFS Scorecard	www.ifsworld.com
Insightformation	Balanced Scorecard Framework	www.insightformation.com
Nexance	NeXancePM	www.nexance.com
Open Ratings	SPImact Balanced Scorecard	www.openratings.com
Oracle	Oracle Balanced Scorecard	www.oracle.com
Panorama Business Views	PB Views	www.pbviews.com
Peoplesoft	Enterprise Scorecard	www.peoplesoft.com
Pilot Software	Pilot Balanced Scorecard	www.pilotsoftware.com
Procos AG	Strat&Go Balanced Scorecard	www.procos.com
ProDacapo	Prodacapo Balanced Scorecard	www.prodacapo.com
QPR Software	QPR ScoreCard	www.qpr.com
SAP	SEM Balanced Scorecard	www.sap.com
SAS Institute	Strategic Performance Management	www.sas.com
Show Business Software	Action Driven BSC	www.showbusiness.com
Stratsys AB	Runyourcompany	www.runyourcompany.com
The Vision Web	Scorecard.nl	www.scorecard.nl
Vision Grupo Consultores	Strategos	www.visiongc.net
4GHI Solutions	Cockpit Communicator	www.4ghi.com

source: Marr, B. and Neely, A. (2003)

6. The balanced scorecard – a resounding success?

Although the balanced scorecard has many advocates, support is by no means universal or unqualified.

Some commentators have remarked upon a perceived absence of rationality and logic in the original presentation of the scorecard. Others have remarked upon specific issues that may result in the failure of the scorecard to live up to its perceived potential for implementation.

Some critics refer specifically to:

- The validity of the objectives/ targets selected to track the observed cause and effect relationships upon which the scorecard relies;
- The scorecard's reliance on control features (performance measures) which are not rooted in the organisation, but which are formulated and distributed in a hierarchical, top-down manner, reducing the likelihood of organisational buy-in; and
- The model's disregard for external competition and/or technological advance, which may introduce uncertainty in terms of risk, and which may threaten or invalidate the present strategy.

6.1 Why balanced scorecards sometimes fail

Undoubtedly some organisations have been less than successful in using a balanced scorecard. The reasons why can be explained by the results of several surveys, which show that:

- 78 per cent of companies that have implemented strategic performance-measurement systems do not assess rigorously the links between strategies and performance measures;
- 71 per cent have not developed a formal causal model or value-driver map;
- 50 per cent do not use non-financial measures to drive financial performance;
- 79 per cent have not attempted to validate the linkages between their non-financial measures and future financial results; and
- 77 per cent of organisations with a balanced scorecard place little or no reliance on business models and 45 per cent found the need to quantify results to be a major implementation problem.

Research by professors Christopher Ittner and David Larcker at Wharton Business School found that many companies mistake the balanced scorecard (and other measurement frameworks such as the Performance Prism) as an off-the-shelf checklist. A lack of understanding of the non-financial areas of performance that might advance strategy can allow self-serving managers to choose and manipulate measures.

Strategy, success or value-creation mapping is a way of facilitating agreement between managers on those non-financial performance drivers that have the greatest impact on the financial outcome. The research by Ittner and Larcker (2003) highlighted the difficulties that most companies have in trying to achieve this, with fewer than 30 per cent of companies developing causal models. Moving to this stage requires a shift in approach to planning and performance and time to think and develop rigorous causal models and performance measures.

Ittner and Larcker also found that organisations adopting a causal business model experience both high levels of managerial satisfaction and return on assets. With the potential for economic benefits dependent on getting a balanced scorecard implementation right, it is perhaps surprising that so few managers devote time to this area.

One approach that organisations may find helpful, is to formulate a 'destination statement', possibly even before considering the scorecard objectives, which sets out a clear idea of what the organisation is trying to achieve. From the destination statement, a menu of strategic options and the supporting 'strategy map' illustrating the cause and effect relationships that underpin the strategy, can be derived. For many organisations, it is advisable to separate the strategy-mapping process from the development of a scorecard.

Equally, some organisations, although successful in tracking the causal relationships underpinning strategy and drafting the balance scorecard strategy, experience problems at the implementation stage.

Some problems that organisations have experienced in using the framework and their underlying causes are considered here.

Transitional issues

1. Major organisational changes
(for example, a merger or acquisition); The balanced scorecard is not a 'quick-fix' approach to alleviate financial problems. Where large-scale, structural organisational changes are driven by the need to remedy financial difficulties, the longer-term commitment required for successful balanced scorecard implementation may be sacrificed for the short-term hunger for apparent improvements in reported financial results.

A potential problem of such short-termism is that unless organisational strategy has been considered carefully, and measures to secure and manage its implementation have been developed and deployed in the 'new' organisation, the strategy is unlikely to be sustainable.

2. Changes in key personnel/management team;
Leadership and management commitment to the balanced scorecard and its underlying principles determines the way it is used and its impact on performance. Existing scorecard initiatives can falter if, following a change in key personnel, new management does not explicitly continue to support its use. It is important to ensure that a change in management does not lead to a preoccupation with operational matters, rather than a continued focus on the strategic issues reflected in the high-level scorecard.

Design failures

1. Confusion regarding primary performance drivers
Often, financial measures carry more weight within an organisation than non-financials, but to drive through a holistic, long-term and sustainable strategic re-alignment, the needs of non-owner stakeholders (service users, service delivery partners, etc) should also be considered. This is particularly important where:

- The business is adopting a value based management (VBM) approach;
- Shareholder value maximisation is the ultimate objective; and
- The needs of non-financial stakeholders are material to the business.

These requirements should be analysed explicitly and translated into scorecard measures. Because of the causality between links within and between scorecard perspectives, it is important that the ultimate impact of the metrics is understood clearly.

To construct a scorecard that balances all stakeholders' requirements the following methodology may be useful:

- Establish prioritised (numerically weighted) stakeholder requirements, based on strategy-adjusted need for improvement;
- Quantitatively rank the internal processes in terms of their aggregate impact on these requirements; and
- Create appropriate metrics for the processes heading the list.

Following this approach guides the scorecard team to a consensus, and provides the logic behind the scorecard which is invaluable in gaining credibility and obtaining buy-in throughout the organisation.

2. Poorly defined metrics;
Metrics may be classified as either:

- Results metrics – measures seen by the process customer. These are the most useful as a management tool, and are usually what appear on the scorecard.

OR

- Process metrics – internal measures that cause the results metrics. Process metrics are most useful to improvement teams and focus attention on the places where improvements will have the greatest impact.

Good metrics are:

- A reliable proxy for outcomes and stakeholder satisfaction;
- Weakness or deficit-oriented (have an ideal value of zero);
- Simple and easy to understand;
- Well-documented, unambiguous, and consistent, with sound operational definitions;
- Timely and accessible to those who can best use them;
- Linked to an underlying data system that facilitates the identification of root causes of gaps in scorecard results; and
- Have a formal process for their continuous review and refinement.

Designing robust performance measures can be aided by the use of a structured approach using a framework such as the one shown below:

> **Title:** a clear title that explains its importance
>
> **Purpose:** for example, measuring rate of improvement
>
> **Relates to:** which business objective
>
> **Target:** setting out the level of improvement expected and in what time frame
>
> **Formula:** specifying the way performance is measured taking into account peoples' behaviour
>
> **Frequency of measurement:**
>
> **Frequency of review:**
>
> **The person who measures:**
>
> **Source of data for the measure:**
>
> **The person/team who should act on the data:**
>
> Their response if performance is acceptable or unacceptable.
>
> The use of this approach could help ensure that measurement stimulates improvement and issues and challenges are discussed.
>
> Neely A. Richards H. Mills J. Platts K. and Bourne M., (1997),

3. Negotiated, rather than stakeholder focused performance targets

Although performance targets should be set according to current knowledge of the means used to achieve them, it is argued that such means are rarely known at the time of target setting – a 'chicken and egg' situation.

4. Lack of a delivery-level target deployment system

Financial systems are able to consolidate data generated at the transactional level (individual sales are aggregated to product levels, then to product line levels and are eventually combined until a single corporate sales figure is generated), and all financial measures can be communicated using a single metric.

The same cannot be true of non-financial performance measures, which may be difficult to communicate in a consistent denomination.

5. No state-of-the-art improvement system is used;

In theory, the strategic balanced scorecard has an in-built mechanism for verifying the validity of the causalities from which it has been developed. However, in practice, organisations seldom have the time or resource to develop and follow through any required strategic realignment, particularly where considerable resources are already deployed. (Computerised balanced scorecard systems may address this perceived short-coming).

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

It has been argued that efforts to undertake a meaningful quantitative analysis of both the impact of actions generating non-financial performance measures and the expected financial results, are not only difficult, but may also be pointless. Diverting resources to develop alternative strategies or strategic objectives may be similarly misguided, for the same reasons, notably:

- The impact of apparently insignificant decisions;
- The operation of the 'chaos' theory within businesses; and
- The potential existence of unknown or un-quantifiable time-lags between actions and impacts, even where causality does exist.

7. Being inward looking and examining the impact of external discontinuities

One criticism levelled at the balanced scorecard is that the framework encourages an internal focus, although advocates argue that the scorecard manages external forces in two ways. First, these are considered when managers performing a SWOT (and/or similar approach) and competitor analysis to formulate strategy, and secondly many scorecard measures are, by their nature, calibrated against competitors (for example, incentive packages).

Where there are significant changes in external conditions, management should assess how these have an impact on the scorecard and whether it needs to modify the objectives, measures and targets. (Examples of such changes include those imposed by competitor activity or government legislation).

To ensure that external factors are considered in strategy development, an organisation should first undertake an assessment of its current position. Management accountants need to take a central role in this assessment, by producing and analysing the right information that supports decision making including:

- A definition of the market, and market segments in which the organisation operates;
- A qualitative and quantitative analysis of these market segments;
- An understanding of the organisation's competitive position in each;
- Identification of sources of competitive advantage; and
- Articulation of findings and definition of issues to be addressed.

The use of the CIMA strategic scorecard outlined in a report from CIMA, *Enterprise Governance: Getting the Balance Right,* will help organisations develop a pragmatic approach to the oversight of a company's strategic process. The report is available at www.cimaglobal.com.

6.2 Presentational/stylistic criticisms

Critics refer to clever (if consciously 'confused') use of linguistic devices in Kaplan and Norton's original presentation of the scorecard's potential – for example the use of rhetoric, storytelling, metaphors and authority arguments in the place of sound argument. They suggest that such devices combine with an existing level of reverence and respect for, between and within the academic, consulting and 'management guru' community to raise expectations of what the scorecard can deliver.

Other criticisms include:

- A danger of using the scorecard to replace a genuinely systematic set of performance measures. Development of such measures for each level of review in the organisation remains a task to be completed, even if developing an executive-level scorecard just happens to be the first step;

- The scorecard pays scant regard to variations in performance. While this may be acceptable at the top level of a global corporation which is interested in tracking the high-level implementation of a new corporate strategy throughout the organisation, it may be a dangerous oversight at front-line level;

- The value of the visual representation and intelligent interpretation of data, key to making variations in data visible, is largely ignored. Both issues may be central to how measures are used in practice, and as such, deserve serious attention in their own right. Kaplan and Norton's book, *Strategy Maps: Converting Intangible Assets into Tangible Outcomes,* shows how strategy mapping can help to develop the power of visual representation; and

- The use of numeric targets as the foundation of making fundamental improvements. It has been suggested that arbitrary numerical target setting is more likely to provoke grudging compliance and counter-productive behaviour than a thirst for fundamental and sustainable improvement.

It is probable that staunch proponents of the scorecard would refer to the importance of education and of gaining genuine buy-in and ownership from employees to the potential of the scorecard. This would, arguably, result in a real commitment to the achievement of mutually agreed scorecard performance targets.

However, the implementation of targets needs to be handled sensitively with clear appreciation of their wider impact.

This is particularly pertinent for targets in the learning and growth perspective of the scorecard, which are likely to have an impact on employees directly. The need to attract and retain the best employees may lead organisations to 'lose' a percentage of the workforce each year, based on poor performance. Where such policies are pursued, careful consideration should be given to communication and implementation of the scorecard, so as to avoid resentment among employees.

Linking targets to individual pay may be a reasonable approach in theory, at least, within cultures where financial reward is prized above other sources of employee compensation. However, such a policy may be irrelevant in cultures where financial rewards are not valued as highly. This point is particularly important for corporations that are considering balanced scorecard implementation on an international scale.

Despite its perceived limitations, it is unwise to write-off the value of the balanced scorecard approach. Experience has shown that, as organisations have bought into scorecard theory, it has evolved from a simple performance-measurement device, into a powerful framework, which may be used:

- As a communication device;
- As a driver and conduit for organisational culture change; and
- To implement, reinforce and continually refine an agreed strategic focus and business model throughout an organisation.

In practice, many organisations (public, private and not-for-profit) have implemented a balanced scorecard approach for these, and other reasons, with differing degrees of success. Some may be counting the cost of an aborted project, where others enjoy a re-alignment of strategic focus, and an engaged, motivated and empowered workforce.

7. Case studies

7.1 Private sector: BAE Systems

This case study is based on information generated by a CIMA-funded research project, undertaken by Dr Mostafa Jazayeri-Dezfuli (Manchester Metropolitan University) and Professor Robert Scapens (University of Manchester).

BAE Systems – the balanced scorecard and the culture change programme.

The balanced scorecard approach was implemented at BAE Systems partly as a consequence of an existing culture change programme. It supported the cultural change project by reinforcing its five fundamental values and encouraging behaviour that was consistent with the company's goals and values.

About BAE Systems: formation and management structure

In 1979, British Aerospace was privatised. In 1999, it was Europe's largest defence company, and on acquisition of Marconi Electronic Systems later that year, it became, as BAE Systems, the world's second-largest defence contractor.

With more than 100,000 employees in nine 'home' markets (UK, USA, Sweden, Saudi Arabia, France, Italy, Germany, Australia and Canada), the company enjoyed annual sales of over £12 billion, an order book of £41 billion, and had customers in more than 80 countries.

The Executive Council of BAE Systems formulates corporate strategy, and the company is divided into business units.

This case study focuses on the Customer Solutions and Support business unit, which is responsible for:

- Service-based prime contracts, programmes and equipment transitioned from the programmes organisation, and the avionics and operations business units;
- Generic support services; and
- The development of opportunities in adjacent markets.

The unit plans to focus its growth efforts on the following three areas:

- Customer support;
- Commercial aircraft; and
- Defence systems.

A historical perspective

The end of the Cold War led to a rapid contraction of British Aerospace's major customer base. Although BAE Systems made its first profit for three years in 1994, its performance was still lacklustre when compared to sector peers and it was recognised that supply far exceeded demand.

Despite major changes to its control systems (including investment in up-to-date facilities and machinery, the adoption of modern manufacturing methods and implementation of activity-based costing and systems and analysis programmes), competitive performance did not improve as expected, and it was time for serious analysis of the company's strengths:

- Good reputation in aerospace;
- Advanced technology;
- Very good outreach to export markets;
- Lots of skilled employees;
- Positive cash-flow;
- In-service training and support; and
- A good relationship with some customers and weaknesses:
- Lack of cost control at product design stage;
- Lack of marketing strategy for new markets;
- Poor response to changing customers; and
- Eroding market share and profit as a result of over-productive European capacities and American competition.

Faced with changing markets and increased competition, the company struggled to re-establish its dominance and regain market share.

The change programme at BAE systems

Senior management decided to implement a comprehensive change programme, which involved:

- Dismantling the conglomerate that had existed since 1979;
- Replacing this with interlocking businesses that would enrich one another and generate competitive benefit for the entire enterprise; and
- Reducing reliance on managerial authority, formal rules and procedures and narrow divisions of work.

At the heart of the culture change programme was BAE's balanced scorecard. The change process was aided by the fact that the information on which successful operation of the scorecard relied, was extractable from BAE's existing SAP R/3 (ERP) system. Thus the scorecard was central to the organisation's control system. (BAE used 'traffic light' reporting to highlight deviations from expected performance).

To achieve the required change, the following steps were followed.

Step one:
Review of competitive position
The chief executive reviewed BAE Systems' competitive position, with regard to market position, technological trends and financial performance.

Step two:
Involvement of senior employees
Aware of the significance of wide employee involvement to drive the change programme, the five company directors joined the chief executive to undertake a comprehensive SWOT analysis of the company.

After initiating a broad review of the company's operations and performance, the chief executive assembled a broader group of employees who would be heavily involved in driving the project forward (the 130 Group). This group included the five company directors and the heads and direct management of BAE Systems' divisions and joint ventures. It was led by a key line manager who had sufficient power to lead the change effort.

Step three:
Creation of a shared vision
The 130 Group developed a shared vision to clarify:

- How to organise the change effort; and
- The direction in which the company needed to move.

Step four:
Communication of the vision
To create a consensus around the vision, the 130 Group drafted a values statement that included five fundamental areas:

- People – our greatest strength;
- Performance – our key to winning;
- Partnerships – our future;
- Customer – our highest priority; and
- Innovation and technology – our competitive edge.

These became the perspectives for the company's balanced scorecard.

The chief executive was key in motivating members of the 130 Group to search for and create opportunities to accomplish the overall vision of the company.

Through the consensual creation of the five fundamental values, the necessary balance between the following dynamics was attained:

- Value creation;
- Strategy making; and
- Human behaviour

Step five:
Plan for and create short-term goals
To avoid any loss of momentum, BAE Systems converted long-term targets into a series of short-term performance goals. The short-term goals focused first on individuals' objectives and behaviours, the aggregation of which resulted in the achievement of business targets.

Operations at BAE Systems were focused on 40 or 50 projects, each linked to a strategic objective. Thus the key driver behind long-term business growth was recognised to be the project reports and accounts, rather than the six-monthly company accounts.

Step six:
Embed cultural change
'Value teams' were established, each led by the managing director of a significant business unit, plus a coach, drawn from the 130 Group. Each participant in the 130 Group had a role in the value teams. (The importance of committed line leadership in securing the sustained effort needed to drive through the culture change should not be understated.)

Step seven:
Articulate the linkages between the cultural change project and organisational competitive success
To maintain commitment to its change programme, BAE Systems used the objective measures derived from the values scorecard, and linked each to its impact on financial performance, and ultimately to the increase in company stock price.

Performance reporting at BAE Systems
BAE Systems used the following modified version of the traffic-light system to report the performance and status of projects:

Green	everything on target;
Amber	minor problems occurring;
Red	major problems exist, requiring major action;
Blue	project completed;
Black	no report exists; and
White	no measure exists.

Overcoming resistance to change
The establishment and role of the 130 Group in crafting and clarifying the proposed value statements were key to overcoming resistance to change.

The chief executive insisted that each member of the130 Group write a full and honest reaction to discussions at its first meeting, and about anything that related to the culture change project.

The impact of the balanced scorecard on management control

BAE Systems used SAP to enable it to report the monthly results of the scorecard in a visually appealing way online. Thus, the information was shared with all company employees, and this was viewed as key to management control.

Importantly, the reports contained layers of hierarchically linked data, which allowed employees to view data from a top-down or bottom-up perspective. (This means that employees can both drill down to identify the factors contributing to performance results, or drill up, to affirm how their own work contributes to the performance of their business unit and to the business as a whole).

When the scorecard was launched in 1997, it included only eight performance measures. The number of measures was deliberately limited, to allow the measurement system to evolve over time, and indeed the scorecard now includes more than 70 measures, which are organised into the five 'values' to facilitate goal setting across different departments and company levels.

(See figures 1 and 2)

Figure 1 BAE's Value Scorecard

Performance
Our key to winning
Measure
- Business unit 3yr cash flow
- Business unit value – 10 yr
- Growth in order book
- Change in overall EFQM* score
- Change in EFQM* score on Business

Partnership
Our Future
Measure
- Growth of supplier assessment rating
- Sales delivery through partnership
- Change in EFQM* score on impact on society
- Reduction in supplier base result score

Customer
Our highest priority
Measure
- Change in EFQM*
- Sales prospects conversion versus planned
- Growth in customer satisfaction

Innovation & technology
Our competitive edge
Measure
- Increase in nominees for Chairman's award
- R&D % of turnover
- Number of best practice case studies
- Value of new lines of business
- Number of employees on intranet

People
Our greatest strength
Measure
- Personal Development Plan deployment
- Change in EFQM* and people satisfaction score
- Opinion survey feedback

* European Foundation for Quality Management

Figure 2
BAE Systems: Performance Measures for the five values (perspectives)

BAE Systems Customer Solutions & Service International Programmes

Core BAE Systems Values Supported	Key Performance Indicators	Measurement Methodology
People	Recruitment and retention	Monthly RAG
	Expatriate redeployment	Histogram
	Personnel development Reviews completed	Monthly RAG
	Personnel development Reviews delivered	Cumulative % graph
	Employee opinion survey	Monthly RAG
Performance	Project management	Monthly RAG
	Prospects/business capture	Monthly RAG
	Process improvement	Monthly RAG
	Order intake	Cumulative value graph
	Operating cash flow	Value graph
	Sales	Cumulative graph
	Oil price	Histogram
	Cash forecasting	Monthly RAG
	Working capital	Monthly RAG
Partnerships	Joint venture performance	Monthly RAG
	Strategic partnership suppliers	Monthly RAG
Customer	Customer satisfaction index	Monthly RAG
Innovation	CAFI* nominations	Cumulative number
	CAFI* awards	Gold, silver, bronze awards

* Chairman's Award for Innovation

Establishing causality within the balanced scorecard
Before BAE Systems developed and implemented the balanced scorecard, attention was focused on measuring and managing according to classic accounting performance metrics. Rather than identifying and examining non-financial value drivers, the company tended to measure what could be measured, rather than what should be measured.

Cause and effect relationships were identified between actions and their outcomes both within and between the identified scorecard 'values', although, as might be expected, there was often a time lag between the two variables (e.g. performance on projects and order intake).

Interestingly, users of the scorecard noted that:
'the more you understand the scorecard and the more you get used to reading it, the more you see these connections and the more you understand that you've got a complex set of connections.'

7.2 Public Sector: Health Action Zone

Developing and applying a scorecard for a Health Action Zone (HAZ) (based on 'A Practitioner's Approach to the Balanced Scorecard', by Allan Mackay)

The operating context
Following initiatives of previous governments (Compulsive Competitive Tendering and the Citizen's Charter), the best-value regime was introduced, in a framework aimed at improving performance management in the public sector by allowing public authorities to set the level and standards of the service they provided.

Where private sector organisations formulate strategy to seek competitive advantage and create value for shareholders (e.g. by maximising existing opportunities and developing innovative products and processes) the strategic priorities of public sector organisations are laid out in government policy, and cascaded in a structured process:

Where private companies must give emphasis to formulating innovative competitive strategy in order to generate sufficient operating profit to sustain and thrive, the strategies of public sector organisations must be focused on achieving performance targets and meeting service delivery agreements with stakeholders.

Internal Structure
In this case study, the governing board and functional heads of the Health Action Zone formed a top team (known as the 'corporate team') to decide on strategy and their priorities which were then cascaded down through the organisation.

The corporate team took responsibility for translating the bold aspirations of the policy document into a coherent set of performance measures and targets, with rigorous performance reviews. Project teams were then formed for distinct streams of work, designed so that those individuals best placed to ensure delivery of targets had real ownership for doing so.

Ensuring ownership of targets
To ensure ownership of performance targets, it was vital that stakeholders shared a common understanding of the policy requirements, and the values that needed to promote their attainment.

This created a shared sense of purpose and helped participants understand:

- What had to be accomplished;
- Why the work was worthwhile; and
- How the goals could be achieved.

The quadrants and measures in the HAZ scorecard had to be relevant to the employees whose behaviour it was seeking to change. This was achieved by constructing a 'corporate' scorecard that reflected:

- The values and beliefs;
- Bold aspirations;
- Strategic aims and priorities;
- Key areas for action; and
- Time required for achievement.

Strategic Priorities
Public Service Agreements

↓

Detailed Aims and Objectives
Detailed Service Delivery agreements

↓

The Organisation's Strategy
Internal business plans, projects and performance measures

↓

Individual Staff Performance and Accountability Plans
Staff performance development and performance appraisal

Building the 'corporate' balanced scorecard – understanding organisational issues and value drivers
The first critical step in the developing the balanced scorecard was for the corporate team to understand the issues facing the organisation. This is the process of establishing:

- The conceptual and operational model of the organisation; and
- The narrative that explains how value is created and delivered, based on strategy, stakeholder interests, ongoing management initiatives and other contemporary frameworks (e.g. best value).

Once these issues had been addressed and agreed, it was necessary to:

- Define the scope of the scorecard project;
- Understand the strategic issues facing the organisation as a whole, using whole systems analysis;
- Understand higher-level guidelines, policies and strategic priorities; and
- Define the scorecard architecture – the design principles leading to the development of a template.

This process focused on the critical business issues (CBIs) – the highest priority problems and opportunities that had to be addressed in order for the strategic vision to be fulfilled. Strategic mapping was used to identify the CBIs.

Importantly, the first step identified:

- The key actions to be addressed; and
- The processes needed to include stakeholders.

The HAZ focused on the tangible results it needed to achieve, and on how such results would be demonstrated to an acceptable level.

Drafting the scorecard
In designing its draft scorecard, the HAZ did the following:

1. Gained (senior) executive commitment and appointed a scorecard 'champion'
The 'champion' was not a member of the corporate team, but was a strong and influential leader who had a pivotal role with influence at all levels in the HAZ.

2. Selected an implementation team
The team comprised people from different departments and functions. As well as securing a blend of functional skills this ensured that all the diverse interests represented were involved and had a sense of ownership for the project success.

3. Determined overall scorecard structure
This step involved holding a workshop for the implementation team to identify appropriate scorecard perspectives. As with many public sector organisations, the HAZ felt the financial perspective included in Kaplan and Norton's generic scorecard to be inappropriate, and instead replaced it with a 'stakeholder' quadrant.

At this point, consideration was also given to the feasibility of cascading the scorecard throughout the organisation, and its capacity for any potential customisation.

4. Undertook a strategy mapping process
To maintain a coherent approach to the scorecard development process, the HAZ completed a process of strategy mapping – following cause and effect logic to link the desired outcomes from the strategy with their drivers.

5. Cascaded the scorecard through the organisation
Recognising the importance of ensuring that employees understood both organisational strategy and their role in delivering this, the HAZ expended resources in creating this understanding through workshops and the circulation of scorecard bulletins.

It was equally important to balance the need to develop an appropriate and relevant scorecard with time requirements to avoid delay and a loss of commitment. The overarching aim, however, was to attain a true alignment of strategic objectives throughout the HAZ.

6. The second workshop
Once the corporate team was confident that it had a robust view of the HAZ strategy, a second workshop was arranged to introduce a wider audience into the scorecard deployment process. Staff attending divided into working groups to weigh the identified objectives and measures in terms of priorities and timetables.

7. Pilot schemes
To test whether or not the scorecard concept was worthwhile, a mock-up of the balanced scorecard was rolled out in the HAZ's operations management division. Following the pilot study, the corporate team again met to establish a final consensus on the measures and decisions reached, and to consider:

- How rewards and remuneration packages could be aligned with the measurement system; and
- How to communicate the proposed innovations and changes to all members of the organisation.

Following the above process led to a definition of:

- A preliminary corporate balanced scorecard;
- A scorecard template that could be deployed in other areas of the HAZ; and
- The identification of critical success factors (CSFs) and their associated measures – key performance indicators (KPIs).

The HAZ 'Corporate' scorecard

Stakeholder Measures • Measures relating to key stakeholder groups • Financial performance measures	**Customers** • Measures of customer perception of service effectiveness • Objective customer measures
Processes • Measures of process efficiency	**Learning** • Employee opinion measures • Competency measures

Identifying and deploying the scorecard measures

The Critical Success Factors (CSFs) are the variables that most influence the organisation's future performance, and one or more was related to a critical business issue. In defining its KPIs, the HAZ considered the following:

- Do we have a balanced set of measures covering all dimensions of the scorecard?
- Are the measures acceptable and fit for purpose?
- Will the measures encourage staff to do the things we want them to do?
- Can each measure be implemented in a reasonable time frame and at an acceptable cost?
- Does each measure have an owner – someone accountable for its implementation and operation?
- Do we have a management process for reviewing measures and ensuring they stimulate purposeful action?

The HAZ's scorecard perspectives explained

The stakeholder and financial quadrant

The focus here was on 'stakeholder relationship management', and stewardship and accountability of public funds.

The HAZ identified its critical business issues (CBIs), critical success factors (CSFs), and key performance indicators (KPIs).

The process quadrant

For the HAZ, the 'process' quadrant related to the service delivery systems/work streams required for achievement of strategic goals. The HAZ had eight major streams of work, and each one needed to be represented as a process on the balanced scorecard.

Where individual work streams (e.g. the project for recuperation and rehabilitation of the elderly) were not fulfilling their objectives (not meeting the needs of the elderly and putting an unnecessary financial burden on the social services budget), work was needed to:

- Discover the scope of the problem; and
- Develop a more co-ordinated and focused response across the various public sector agents involved.

To become a managed process, the HAZ had to ensure that each stream of work:

- Possessed a mission statement consistent with the organisation's core values;
- Had a quantifiable outcome target;
- Represented best value in resource allocation;
- Had demonstrable causal links with outcome targets;
- Had a 'value chain', mapped using a high-level flow-chart technique;
- Named critical sub-processes; and
- Allocated roles and responsibilities for the performance of the supporting processes.

Using the managed process dimension facilitated:

- The identification and analysis of work streams; and
- Consideration of the viability of projects.

Once managed processes were established, the process quadrant focused on outcome/output targets.

To evaluate whether the work stream/process was managed, the HAZ addressed the following questions:

- Does the project have a value/mission consistent with that of the organisation?
- Have quantifiable output targets been established?
- Do such targets represent achievement of the values/mission statement, contribute to overall organisational aims, and demonstrate best value?
- Are mapped and named processes and sub-processes, allocating roles and responsibilities documented?

The learning quadrant

The HAZ needed a clear understanding of current and future performance targets, which in turn necessitated a rigorous and objective audit of current organisation and performance. To achieve this, the HAZ used a whole-systems scanning and analysis approach to identify and prioritise environmental challenges which have an impact on the achievement of strategic objectives and indicate where the organisation needs to work differently or attain new competencies.

An alternative tool is the Business Excellence Model, which enables organisations to self-assess objectively against recognised criteria and to benchmark against relevant best practice.

Because of the dynamic environment in which the HAZ operates, it was helpful to have an early warning system (e.g. scenario planning) in place to prepare the organisation for conditions not anticipated in the traditional business planning process.

The customers, citizens and service recipient quadrant

In shaping the focus of this quadrant, the HAZ had to take into account the focus of its projects, and:

- Understand the strategic impact(s) of each project, and its contribution to the achievement of the corporate mission; and
- Develop KPIs to support each of these impacts.

By developing this framework the corporate team was informed by CSFs and CBIs relevant to the stakeholder, process and learning dimensions.

Thus, following identification of CBIs, the development of CSFs, and their associated KPIs, was of primary importance.

Key points

- For complex organisations with a range of stakeholders, focus and priorities change at different organisational levels, and in different divisions;

- To ensure ownership of targets, all stakeholders must have a common understanding of policy requirements and the values needed to promote their attainment;

- CBIs are the highest priorities and opportunities that must be addressed if the strategic vision is to be fulfilled;

- CSFs are the variables that will most influence future performance, and are normally related to a CBI; and

- Eventual balanced scorecard design must be readily understood and accepted by all stakeholders;

- All streams of work need to become managed processes to achieve their full potential, and deliver their most strategic impact.

Appendices

Appendix 1: The Value Dynamics Framework at Dell

Physical assets

1. Land
2. Buildings
3. Equipment
4. Inventory

Customer assets

1. Customers
2. Channels
3. Affiliates

Organisational assets

1. Leadership
2. Structure
3. Culture
4. Brand
5. Systems
6. Processes
7. Intellectual Property

Financial assets

1. Cash
2. Accounts Receivable
3. Debt
4. Investments
5. Equity

Employee & supplier assets

1. Employees
2. Suppliers
3. Partners

Adapted from *Cracking the Value Code: How Successful Businesses Are Creating Wealth in the New Economy* by Richard Boulton, Barry Libert and Steve Samek.

Appendix 2 The Business Modelling Approach's 'if-then' matrices

Financial drivers matrix	Financial goals	
	Y_1	Y_2
Customer value:		
X_1	√	√
X_2	√	√

Step 8: Prepare 'Customer Value Drivers' Matrix

Customer value drivers matrix	Customer value	
	Y_1	Y_2
Core/support processes:		
X_1	√	√
X_2	√	√

Step 9: Prepare 'Process Drivers' Matrix

Process drivers matrix	Core/support processes	
	Y_1	Y_2
Inputs/suppliers:		
X_1	√	√
X_2	√	√

Appendix 3 The Business Modelling Approach's implementation questionnaire

Panel A: Defining the customer
1. What is our customer value proposition?
2. Which customers are our most profitable and why?
3. Which customers offer the most profitable growth opportunities?
4. Which customers are currently unprofitable and why?
5. Why do customers choose to do business with our competitors rather than us?

Panel B: Defining the outputs
1. What are our core strategic products and/or services?
2. Why do these core strategic products/services succeed in the marketplace?
3. What does the next generation of successful products/services look like in our business?
4. How much revenue are we generating from newly developed products/services?
5. How many 'voice of the customer' improvements have we embedded into our products/services?

Panel C: Defining the processes
1. What core and support processes are critical to satisfying customers?
2. What are the critical success factors for each of these processes (e.g. quality, time, flexibility and cost)?
3. What functional departments must collaborate to optimise our core and support processes?
4. What developing process technologies could threaten our competitive position?

Panel D: Defining the inputs
1. Which assets per the VDF framework are critical to supporting our key core and support processes?
2. Which assets are not critical and can we streamline or divest them?
3. Which assets need to be developed to sustain the next generation of our products/services?

Panel E: Defining the suppliers
1. Which suppliers are critical to our business? Which do we view as strategic alliances, co-operative partners, or arm's length suppliers?
2. What competencies do our suppliers need to possess, going forward, to ensure success?
3. Are our suppliers' incentives aligned with ours?
4. Are we at risk of over-relying upon one or more suppliers?

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Useful websites:

Further information on the balanced scorecard is available from many websites, including:

www.cimaglobal.com
www.cimaglobal.com/sem
www.2GC.co.uk
www.insead.edu/discover_INSEAD/
www.som.cranfield.ac.uk/som/cbp/pma/
www.bscol.com
www.ifac.org
www.bam.ac.uk
www.tylermangan.com
www.som.cranfield.ac.uk/som/cbp
www.fpm.com
www.hbsp.harvard.edu/
www.aspiren.com

CIMA Mastercourses

Information about courses on the balanced scorecard is available from the CIMA Mastercourses section of CIMA's website: www.cimaglobal.com

Enterprise Governance

Visitors to CIMA's website can download a major report 'Enterprise Governance: Getting the Balance Right' recently prepared in conjunction with the International Federation of Accountants.

Enterprise governance is a term used to describe a framework that covers both the corporate governance and business management aspects of an organisation. CIMA is currently developing a Strategic Scorecard as a means of improving strategic oversight. An executive summary and the full report are each available at:

www.cimaglobal.com

Effective Performance Management with the Balanced Scorecard

Maximising Shareholder Value: Achieving clarity in decision-making

and David Larcker's Presentation as CIMA's 2004 visiting professor titled
Performance Measures: Insights and Challenges
are now available for download at:

www.cimaglobal.com