Chapter 23

Performance evaluation and feedback reporting

REAL WORLD CASE

This case study shows a typical situation in which management accounting can be helpful. Read the case study now but only attempt the discussion points after you have finished studying the chapter.

As part of the annual Group business planning process, challenging financial, operational and sustainable development targets are set to form a Group Scorecard. Performance during the year is then measured against this Scorecard and annual bonus awards are made on this basis. The financial objectives relate to Total Shareholder Return (TSR)* relative to other major integrated oil companies, and to Return on Average Capital Employed (ROACE). The operational objectives relate to portfolio value growth with key targets for each business. The sustainable development objectives focus on people, health, safety, environment and reputation. The 2003 Scorecard weightings are 60% for financial objectives, each factor equally weighted, 20% for operational objectives and 20% for sustainable development objectives. The same approach has been adopted for 2004.

*TSR is measured by the average weighted share price performance plus dividend of Royal Dutch and Shell Transport over the ten-day period at the beginning and end of the relevant financial year.

Source: Royal Dutch Petroleum, Annual Report, 2003, p. 113.

Discussion points

1 What is the mix of financial and non-financial performance measures mentioned in this extract?

2 How easy would it be to measure the performance of an individual against these targets?

Contents

Learning outcomes

After studying this chapter you should be able to:

- Distinguish feed forward control from feedback control.
- Explain the main features of performance reports.
- Explain how performance evaluation is carried out.
- Explain the use of benchmarking in performance evaluation.
- Explain and give examples of non-financial performance indicators.
- Explain the nature and use of the Balanced Scorecard.
- Understand how management may set standards of performance and reward achievement of standards.

23.1 Introduction

This management accounting text has been based throughout on the view that those who manage a business have a need and a desire to make informed judgements and decisions. In a continuing cycle of management action, there will be a judgement, from which a decision will be formed, followed by evaluation of that decision and a new judgement based on that evaluation. The stage at which the decision is evaluated requires management accounting to exercise its score-keeping function by devising quantitative measures of performance. It also calls on management accounting to direct attention to those areas most urgently requiring a judgement and a further decision. Management functions have been described in Chapter 16 in terms of **planning, decision making** and **control**.

Planning is sometimes referred to as **feed forward control**. This means making predictions of outputs expected at some future time and then quantifying those predictions, in management accounting terms. The budgetary process (Chapter 21) and setting standards (Chapter 22) are examples of management accounting approaches which have a feed forward (or planning) aspect. Feed forward control systems are very effective, if carried out well, because they anticipate problems rather than wait for them to happen.

Chapter 22 has also dealt with variance analysis as a technique for control in comparing the actual outcome with the standard expected. This is sometimes referred to as **feedback control**. This is useful for looking back at what went wrong (or what went well) and for taking corrective action to ensure that a problem does not continue.

In this chapter we consider in more depth feedback control, which involves comparing outputs achieved against outputs desired and taking corrective action if necessary. To provide this type of control it is essential to identify the responsibility for the costs and for taking whatever action is required. The term **responsibility centre** is used to identify the unit to which a feedback report is to be made. A responsibility centre could be a **cost centre** where the individual manager has responsibility only for costs, a **profit centre** where the individual manager has responsibility for costs and revenues, or an **investment centre** where the individual manager has responsibility for costs, revenues and investment in assets. (Cost centre, profit centre and investment centre are defined in Chapter 17.)

Definitions

Feed forward control means making predictions of outputs expected at some future time and then quantifying those predictions, in management accounting terms.

Feedback control involves comparing outputs achieved against outputs desired and taking corrective action if necessary.

A **responsibility centre** is an area of responsibility which is controlled by an individual. It might be a cost centre, a profit centre or an investment centre.

In any control process, feed forward or feedback, there are three essential elements:

1. there must be objectives which state the aim or purpose of the control;
2. there must be a model which can be used to predict an expected outcome;
3. there must be power to act in order to take corrective action.

In addition, for feedback control there must be the ability to measure the actual outcome on the same basis as the predicted outcome.

For a feedback control system to be effective, the following basic principles should be observed:

- the benefits from the system should exceed the costs of implementing it;
- the performance criteria being measured should be reported promptly so that rapid action may be taken;
- reports should be as simple as possible and readily understood;
- reports should highlight the significant factors requiring management attention;
- the reporting framework should be integrated with the organisational structure so that responsibility is identified correctly.

The operation of feedback control will be explored in this chapter in relation to short-term decision making. (Feedback on long-term decision making will be covered in section 24.8.2.) First, in this chapter we discuss the nature of the report to be written for performance measurement purposes.

23.2 Preparing performance reports

There are three basic questions in relation to report preparation:

1 To whom should the report be addressed?
2 What should be reported?
3 How frequently should the report be presented?

23.2.1 To whom should the report be addressed?

In the context of the management of responsibility centres, the report should be addressed to the manager in charge of the responsibility centre. That could be a cost centre, a profit centre or an investment centre. If the report is to have meaning for the manager concerned, it must include only those costs which may be controlled by the manager of the responsibility centre.

The level of detail in the report will be influenced by the managerial position of the person to whom it is addressed. Reports to senior management will be condensed so that those managers can see the broader picture. They will of course also have access to the more detailed reports, should they so wish.

23.2.2 What should be reported?

The report should be designed to identify clearly those items that are controlled by the manager of the particular responsibility centre. If the responsibility centre controls the price and quantity of an item, then both should be reported and the combined effect quantified. If the responsibility centre controls quantity but not the price of an item, then the report should be designed to emphasise the quantity aspects of transactions in the reporting period.

It could be that, despite a lack of direct responsibility, it would be helpful for the manager of the responsibility centre to be aware of all the costs incurred as a result of the activity of the centre. If that information is felt to be useful, then it could be included in the report, but subheadings would be required to make clear the distinction between controllable and non-controllable costs.

The design of the report is extremely important because the manager of the cost centre, profit centre or investment centre will not use the report effectively if it does not provide useful information in a helpful manner. Managers should be consulted on design of reports, and there should be trial periods of experimentation with a new design of report before it comes into routine use. Graphs, bar charts and pie diagrams may be ways of communicating more effectively than through tables of figures alone.

23.2.3 How frequently should the report be presented?

The frequency of reporting should be related to management's information needs. There may be a need for information on a daily basis. Computers provide on-screen access to information so that the traditional concept of a reporting period, with a printed report at the end of each period, may no longer be appropriate in all circumstances. There is, however, a danger in reporting all items too frequently. Reports have to be read and acted upon, and reporting which occurs too frequently could result in too much time being spent on the review activities.

The question of frequency of reporting is perhaps best answered in terms of the frequency of the cycle of review and corrective action. If daily action is required in an operation, then daily provision of information about the activity will allow corrective action at the earliest possible opportunity. If a monthly review cycle is more appropriate, then the reporting system should be designed to provide monthly summaries. It is vitally important that, whatever the frequency chosen, the reports are produced in a timely manner.

If a computer is in use to record costs and quantities, then the program should be such that the reports required are generated as part of the process so that there is no delay in transferring information for reporting purposes.

Activity 23.1

Look back to the variance report on Brackendale presented in Chapter 22. Comment on the good and weak points of that report, in the light of the first two sections of this chapter, and suggest ways in which the report could be improved.

23.3 Performance evaluation

Performance evaluation requires the management accountant to carry out the following process:

- decide on what to measure
- plan how to report
- consider the behavioural aspects.

23.3.1 What to measure

In looking at what to measure, we will draw on the material of previous chapters, selecting aspects of management accounting which lead to a measure of performance. Because each management accounting technique serves a different purpose, the decision on what to measure will also depend on the intended purpose and will be discussed in the context of specific applications.

23.3.2 How to report

In planning how to report, the general principles applied will be those of responsibility and the separation of **controllable** and **non-controllable** costs. All costs are controllable at some level of management but they may not be controllable at a lower level. Breaking down cost into the separate elements of quantity and price, the extent of control may vary for each element. There will be those in the organisation who have authority to acquire resources, thus controlling quantity and price. There will be others whose job it is to make use of the resources acquired, in which case they will control only the quantity element of cost. There will be others again whose job is to find the best price for resources. They will control only the price element of cost.

It is important to distinguish controllable from non-controllable costs when seeking to establish responsibility for costs. Frequently, the responsibility will be shared, and it is important that the sharing is correctly identified.

Definitions

A **controllable cost** is a cost which is capable of being regulated by a manager within a defined boundary of responsibility.

A **non-controllable cost** is one which is not capable of being regulated by a manager within a defined boundary of responsibility, although it may be a cost incurred so that the responsibility may be exercised.

Performance reporting is partly concerned with planning and control, so the idea of controllable and non-controllable costs is important. However, it is also applied in decision making, and further classifications into relevant/non-relevant and avoidable/unavoidable costs may therefore also be used within the same report.

When a decision is taken there is usually more than one option available. Avoidable costs are those costs that may be saved by not taking a particular option. Unavoidable costs will not be saved by such an action.

Definitions

An **avoidable cost** is one which may be eliminated by not taking a particular option.

An **unavoidable cost** will not be eliminated by taking a particular action.

23.3.3 Behavioural aspects

Performance evaluation has behavioural aspects because measurement of performance has a direct impact on the organisation's perceptions of how its staff are performing and on the individual staff member's perception of his or her relative performance. As a general guide, favourable reactions to performance reporting are likely to be maximised if staff are made aware in advance of how the performance measures will be calculated and how the responsibility for costs will be allocated. If the individual has control over quantities and prices, then that person should be regarded as having control over, and responsibility for, that item. If the individual has control over quantities but not prices, then it may be appropriate to report the cost to that individual but only regard responsibility as extending to the quantity aspects. If the individual has no control over quantity or price, then no responsibility for the cost of that item can be identified, although there may be a separate question of whether that item should be reported to the individual in order to heighten awareness of the impact of non-controllable costs.

Activity 23.2

You are the team leader for a group of social workers who specialise in dealing with the needs of elderly persons in their homes. You have been told by your line manager that your team's budgeted spending limit will be exceeded by the end of the year if you continue with the present level of activity. The major items of cost are: team members' salaries, travel to clients' homes for visits and a charge from the local authority for the provision of office facilities. Salaries have increased because of a national pay award not allowed for in the budget. Travel costs have increased over budget because of fuel price increases. The local authority has kept the charge for office facilities within the budget. Your line manager has some discretion to make savings under one expense heading to match overspending under another. How will your team explain its performance in the end-of-year report?

Chapter 22 concentrated on the technical aspects of cost control by way of variance analysis. There also needs to be a concern with the human implications of variance analysis. It may be that the variance analysis approach is seen as a means of managerial review of subordinates, in which favourable variances receive praise and adverse variances are seen as a cause for corrective action to be taken. That approach may have undesirable consequences for a number of reasons:

1 Employees may reject standards because they were not adequately consulted in setting them.
2 Those under review may divert their efforts into minimising the adverse variances rather than making positive steps towards overall performance improvement.
3 Negative feedback may reduce motivation, leading to reduced effort and lower performance levels.

Those who are concerned at these negative aspects of traditional variance analysis have suggested that there may be a need for accounting systems which are less evaluative in approach. The emphasis should perhaps move to learning and improvement rather than stressing personal responsibility, accountability and past achievement. Later in this chapter there are some ideas about performance measurement using non-financial measures which may be more relevant than financial measures at the individual manager level. First, however, a case study is used to illustrate the traditional variance analysis approach to performance evaluation and control.

Activity 23.3

You are the financial manager of a school where some teaching departments are spending more than their budget allowance on materials and others are being frugal and spending less. It is six months into the financial year and you would like to give a warning to the overspenders, but also find out why there are underspenders. Suggest two ways of dealing with this problem, of which one way would probably create friction between yourself and the teachers, while the other would encourage the teachers to work with you in controlling the overall budget for the school.

23.3.4 Case study: evaluating and reporting performance

Fiona McTaggart now explains a situation where she prepared performance reports using flexible budgets and also shows how the performance report appeared in each case.

FIONA: *My client was in a manufacturing business which produced hand-crafted cane furniture. I was asked to devise a monthly performance reporting system which would provide performance measurement of the manufacturing activity. Three levels of reporting were required. The managing director required a brief summary of any matter requiring executive action but did not want all the details each month. The furniture supervisor needed a much more specific analysis of the performance of the activity as a whole and the relative performance of each employee. There was also a proposal to give each employee a personal performance statement that showed some indication of the average performance of the activity as a whole, without giving individuals access to information which was best kept personal to each employee.*

The budget was set at the start of the year based on average monthly output of 300 chairs and 80 tables. In practice the actual monthly output varied around this average. I recommended a three-column form of report which would show the original budget for one month's output, the flexible budget showing the costs expected for the actual level of output achieved and the actual costs incurred.

I made a list of all the costs incurred in making cane furniture. The main direct costs were materials and skilled labour. Although the employees were employed on full-time contracts, it was useful to identify separately the time they spent in productive activity making the furniture, which I classed as a direct cost, and the time they spent in non-productive activity, which I classed as an indirect cost.

I then listed all the indirect costs and subdivided them according to various levels of responsibility. Each employee was responsible for a portion of indirect materials used in fastening the cane together and was also responsible for a portion of equipment maintenance and depreciation. This indirect cost was allocated in proportion to the output produced. It might sound rather hard that the employee's responsibility for cost increased as the output increased, but it was decided in discussion that staff needed to be aware of the costs incurred when productive output takes place. Individual employees would not be regarded as being responsible for unproductive time unless they directly caused it as a result of their individual actions.

The furniture supervisor was responsible for control of the total costs allocated to the individual operative staff, plus the cost of non-productive time (to the extent that this was in the control of the supervisor), and the overhead costs of heating and lighting the workshop area.

The managing director had ultimate responsibility for all costs, including the cost of administration, providing adequate working conditions, the employer's share of employment costs and any non-productive work due to causes beyond the control of the furniture supervisor.

Exhibit 23.1 shows how the performance report was designed. There were three separate parts to the report. The first was for individual members of staff. The second was for the furniture supervisor, who also had access to the individual staff reports, and the third was for the managing director, who had access to the more detailed reports if these were required.

Each report set out the variances from flexible budget for each element of cost. At the foot of the report was a section for highlighting matters for attention and a space below for

Exhibit 23.1

Monthly performance report: (a) employee report; (b) supervisor's report; (c) managing director's report

Part A: Employee report	Name...............*Employee X*..............			
Date of statement	....			
	Budget	Flexible budget	Actual	Variance
Output: target/actual	100 chairs 20 tables	110 chairs 18 tables	110 chairs 18 tables	
Direct materials	...	...	...	...
Direct labour	...	...	...	...
Controllable indirect costs	...	...	...	...
Indirect materials	...	...	...	...
Total controllable costs for employee X	...	...	...	...
Cumulative controllable costs for year to date	...	...	...	...
Maintenance	...	...	...	...
Depreciation	...	...	...	...
Total for employee X	...	...	...	...
Cumulative for year to date	...	...	...	...
Matters for attention Action planned				

Exhibit 23.1 continued

Part B: Supervisor's report	Name....................................			
Date of statement	....			
	Budget	Flexible budget	Actual	Variance
Output: target/actual	300 chairs 80 tables	320 chairs 76 tables	320 chairs 76 tables	
From Part A Controllable costs for each employee				
Costs of employee X	...	...	...	...
Costs of employee Y	...	...	...	...
Costs of employee Z	...	...	...	...
Total controllable costs				
Overheads				
Controllable indirect costs	...	...	...	...
Non-productive time	...	...	...	...
Heating & lighting	...	...	...	...
Matters for attention Action planned				
In practice this report would also include cumulative totals for the year to date, as shown on Part A, but they are omitted here so that the main features are more readily seen.				

the person receiving the report to write a comment. In the case of individual employees, a comment was expected on any action planned in response to matters noted. This action plan would be discussed and agreed with the supervisor. In the case of the report to the supervisor, the comment was expected to show the action planned for the production activity as a whole, or for individual employees where there was a particular problem. In the case of the report to the managing director, the comment was expected to confirm discussions with the supervisor but also to note any action on indirect costs regarded as the managing director's responsibility.

We had a trial run of this reporting format for three months, to iron out any wrinkles, and during that time there were some difficulties in getting the overhead responsibility allocation right. Everyone denies responsibility for indirect costs but, at the end of the day, they have to be incurred and are an unavoidable consequence of business activity. It was eventually agreed that the direct cost allocation would remain, but that, for employees and the supervisor, the emphasis would be on responsibility for the volume aspects of the allocation, with any external price increases being regarded as non-controllable or else a matter for discussion with the purchasing section.

Fiona's description has concentrated very much on the two questions regarding what to measure and how to report. Since she is describing the early stages of designing

Exhibit 23.1 continued

Part C: Managing director's report	Subject: *Cane furniture production*			
Date of statement	....			
	Budget	Flexible budget	Actual	Variance
Output: target/actual	300 chairs 80 tables	320 chairs 76 tables	320 chairs 76 tables	
From Part B				
Total employee controllable costs	...	...	...	...
Total indirect costs for which supervisor is responsible	...	...	...	...
Other overheads				
Administration	...	...	...	...
Employment costs	...	...	...	...
Abnormal non-productive time	...	...	...	...
Total				
Matters for attention Action discussed with supervisor				
In practice this report would also include cumulative totals for the year to date, as shown on Part A, but they are omitted here so that the main features are more readily seen.				

and implementing a new system, there is no information on the behavioural aspects of how the reporting system operated in practice. There is a description of the trial run and the extent to which the views of participants were taken into account in the design of the final report. The case study would need to be followed up after a period of, say, three months of operation, to find out how effectively the new system was achieving satisfactory control.

Activity 23.4

Read the case study again and identify the points at which Fiona McTaggart's actions match the principles of reporting set out in this chapter.

23.4 Benchmarking

Benchmarking is the name given to the process of measuring the organisation's operations, products and services against those of competitors recognised as market leaders, in order to establish targets which will provide a competitive advantage.

The stages of benchmarking are:

1 Decide what area of activity to benchmark (e.g. customer services, business processes in particular departments, quality of employees, standard of training).
2 Select a competitor who is reputedly the best in the area of activity to be benchmarked. Major companies in one country may target an international competitor rather than a domestic company. In some benchmarking situations the competitor may agree to an exchange of information because both parties believe they can benefit from the exchange.
3 Decide on the appropriate measurements to be used in defining performance levels.
4 Determine the competitor's strengths and compare these with the company's own record.
5 Use the information collected as the basis for an action plan. To be effective, this action plan must involve all grades of employee working in the area of activity.

The management accountant has a role throughout this process because the emphasis is on improving profit and measuring performance. The management accounting role starts with directing attention, by producing the performance measures and showing the relationship with profit improvement. It moves into problem solving as the information on comparative performance measures is collected and has to be transformed into an action plan for the organisation. It then takes on the scorekeeping aspect as the achievement of total quality is monitored.

23.5 Non-financial performance measures

Within an organisation, people are employed to carry out specific activities. The only aspect of their work over which they have direct control may well be the volume and the quality of tasks they undertake. Applying revenues and costs to these activities may be important for the organisation as a whole, but will have little meaning for the individual employee who does not sell the goods or services directly and does not purchase the input materials.

To ensure that the motivation of employees is consistent with the profit objectives of the organisation, it may be necessary to use non-financial performance measures to indicate what is required to achieve the overall financial targets. Using non-financial performance measures does not mean that the financial performance measures may be disregarded. They are ways of translating financial targets and measures into something that is more readily identifiable by a particular employee or group of employees.

The non-financial performance measures should cover both quantity and quality.

23.5.1 Quantity measures

It is necessary to convert the accounting numbers to some measure of quantity which relates more closely to individual members of an organisation. If the employees are involved in the entire productive process, then the financial target may be converted to units of product per period. That approach may be more difficult when a service activity is involved or a group of employees is involved in only part of a production process.

As an illustration of the problems of performance measurement in a service business, take an example of a school where activities are subdivided by subject area. The primary measure of activity will be the number of pupils taught, but the individual departments will have no control over that number. If teaching staff are appointed on permanent contracts, so that salary costs are largely fixed costs, then the cost per student will vary depending on the number of students taught in any period. A performance measure of cost per student may be attractive to the management accountant but will have little impact on the staff of the history department whose main aim is to ensure that their pupils achieve high grades in the end-of-year examinations. For them, examination success rates are the prime performance measure and they will be concerned to ensure that fluctuations in pupil numbers do not affect that success rate. A performance report on the history department would therefore emphasise first of all the non-financial performance, in terms of examination success, but would then additionally report the cost implications so that the consequences of achieving a high, or a low, success rate could be linked to the cost of that activity.

23.5.2 Quality measures

The ultimate measure of quality is customer satisfaction. Companies will invest time and effort in measuring customer satisfaction, perhaps by questionnaire survey or possibly by telephone interview. Indirect measures of customer satisfaction may be found in complaints records, frequency of repairs under warranty and level of goods being returned as unwanted.

Another important aspect of quality is the process undertaken by the organisation. This is so important that an external agency (often the auditors) may be employed to provide independent certification of the quality of the process and the controls within the process.

Finally, quality is measured also in terms of the inputs to the process, where inputs may be materials, labour and capital equipment. Quality of inputs may be controlled directly by imposing standards on suppliers, or may be monitored by reviewing the rate of return of unsatisfactory goods, the non-productive time incurred because of faulty equipment, or the reliability of delivery dates and quantities.

Some examples of non-financial performance measures are:

1 in respect of demand for products:
   (a) number of enquiries per advertisement placed; and
   (b) percentage of customers who remember the advertisement;

2 in respect of delivering the products:
   (a) error free deliveries as a percentage of total deliveries;
   (b) number of complaints as a percentage of units sold; and
   (c) time between receiving customer order and supplying the goods or service.

An electricity supply company provided the following information about non-financial performance over a one-year period:

Restore supply in three hours	Target	80%
	Performance	**83.8%**
Restore supply in 24 hours	Target	99%
	Performance	**99.9%**
Moving a meter inside 15 working days	Target	95%
	Performance	**96.7%**
Reply to telephone calls within 10 seconds	Target	90%
	Performance	**91.1%**

Activity 23.5

Write out five non-financial performance measures which could be reported by an organisation which delivers parcels to the general public and to businesses.

23.6 The balanced scorecard

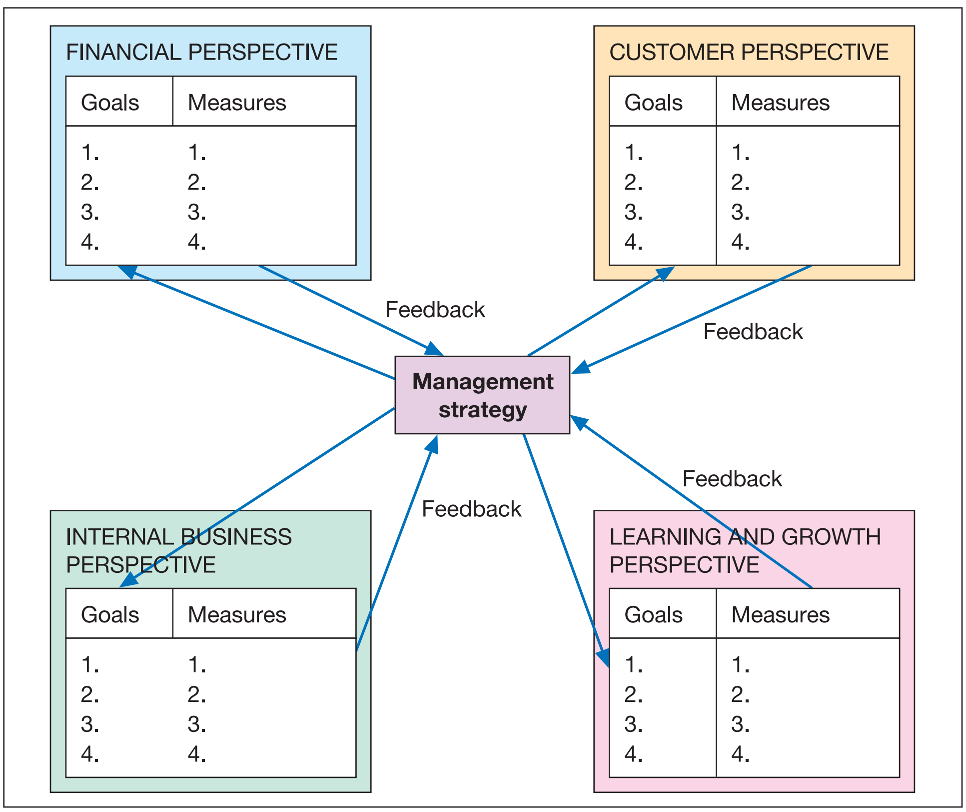
Section 23.5 has illustrated some of the non-financial measures of performance that may be used alongside the financial measures. There is a danger of creating increasingly long lists of performance measures with no way of balancing the perspectives resulting from these different aspects of performance. Kaplan and Norton (2001) put forward an idea which they called *The Balanced Scorecard* as a way of linking performance measures. It focuses on the key goals of the organisation and the measurement of performance in achieving those goals.

They suggested that performance measurement can be viewed by asking four questions:

- How do our customers see us? (Customer perspective)
- How do our shareholders see us? (Financial perspective)
- How do we see ourselves? (Internal business perspective)
- Can we learn and grow to improve and create value? (Learning and growth perspective)

For each of these four questions the organisation should set major goals and define performance measures which demonstrate that the goals are being achieved. It might be reasonable to set three or four goals in each case. This would lead to a scorecard that would fit on a single sheet of paper. There is no specific form for the scorecard. Exhibit 23.2 shows an example. Here we see the management strategy being applied to set the goals for each section of the scorecard, and the performance measures being used to give feedback to management on how well the goals have been achieved.

Exhibit 23.2
Creating a Balanced Scorecard



Fiona now gives an example of work she has carried out to create a balanced scorecard system in a service business.

I have recently worked on designing a Balanced Scorecard for a company which owns a chain of hotels in major towns and cities around the country and wanted to evaluate the relative performance of the separate hotels. The hotels are designed to a standard model of 'no-frills' value for money and comfort, with secure parking for cars. Customers are likely to stay for one or two nights, either as business customers looking for convenience and reasonable pricing, or as families and tourists on short-stay visits. As this was the first attempt at creating a scorecard we used only three goals for each aspect of the balanced scorecard. It was important to involve all staff in setting up the scorecard so we established focus groups in each city or town to give their input to the goals and measurements. Each focus groups included an operations manager, catering and cleaning staff and a regular customer. The result is set out in Exhibit 23.3.

Exhibit 23.3

Creating a Balanced Scorecard for a hotel chain

Financial perspective	
Goal	*Measure*
1 To reduce unfilled room rate by 3% over the previous year, by offering discount for a third-day stay.	Marginal revenue from additional room occupancy, compared with marginal costs of creating that occupancy, with estimate of revenue lost on third-day discount.
2 To control fixed overhead costs within 3% overall increase on previous year.	Cost records – monthly update of fixed overhead actual cost against target.
3 To control variable costs per room per night at 50% of room charge.	Cost records – monthly report on variable room costs compared to room rents received.
Customer perspective	
Goal	*Measure*
1 To increase market share by 5% over 12 months.	Market share surveys published in trade journals, plus reports commissioned from benchmarking organisations.
2 That 50% of customers return for a second visit.	Customer satisfaction questionnaire left in bedroom plus follow-up telephone enquiry.
3 That 90% of customers express general satisfaction with the service, especially cleanliness and staff courtesy.	Customer satisfaction questionnaire left in bedroom plus follow-up telephone enquiry.
Internal business perspective	
Goal	*Measure*
1 To improve customer satisfaction by improving checkout times.	Number of checkouts completed between 7a.m. and 9a.m. each day.
2 To improve the cycle of laundry delivery and return from 4 days to 3 days, on average.	Records of laundry despatch and return.
3 To identify and implement one innovative practice.	Staff suggestion box – list of staff suggestions and note of actions taken to review and implement each.
Learning and growth perspective	
Goal	*Measure*
1 To achieve 60% participation of relevant staff in a vocational training programme.	Staff records of attendance and achievement in vocational training programme.
2 To empower staff in setting personal goals that are consistent with organisational goals.	Record of annual appraisal reviews where appraising manager confirms that personal development plans are consistent with organisational goals.
3 To improve internal communication process by weekly bulletin to staff.	Record of bulletin issues and staff feedback on relevance and usefulness.

Kaplan and Norton soon realised that the Balanced Scorecard was more than a performance report. It was a useful tool in the system of strategic management. They set out five principles for a strategy-focused organisation:

1. Translate the strategy into operational terms.
2. Align the organisation to the strategy.
3. Make strategy everyone's everyday job.
4. Make strategy a continual process.
5. Mobilise leadership for change.

This makes the Balanced Scorecard a tool of forward planning for change, as well as being a retrospective view of past performance. An important aspect of using the Balanced Scorecard is the involvement of employees in all stages of setting the scorecard and monitoring the outcome. It is flexible so that the Balanced Scorecard can be designed to be relevant to the organisation and its operations or procedures.

Activity 23.6

Imagine that you are planning to start a business operating a taxi service. Write a Balanced Scorecard containing two goals and two measurements of achieving the goals for each of the four sections of the Balanced Scorecard (Customer perspective, Financial perspective, Internal business perspective and Learning and growth perspective).

23.7 Management use of performance measurement

This chapter has concentrated largely on how the management accountant may provide measures of performance. For such measures to have relevance in a managerial context, they should satisfy three criteria:

1. There should be well-defined performance measures which represent a range of performance from bad to good.
2. There should be defined standards of performance which indicate what is good and what is not good.
3. There should be rewards attached to successful attainment of targets and penalties attached to non-attainment of targets.

This section describes a case study bringing together the use of benchmarking and performance standards to achieve the objectives and strategy of the organisation.

23.7.1 Performance measures

Fiona McTaggart describes a recent experience in establishing performance measures through benchmarking:

I have recently completed a project advising a parcel delivery business on establishing a performance measurement system for distribution depots spread across the country. The business has a series of warehouse depots at locations convenient to major towns. Parcels are carried by lorry from one depot to another so that the delivery targets are met with careful attention to cost control. The non-financial performance measure which most concerns customers is meeting targets. Other companies in competition with this company are also performance conscious and will publicise their performance in meeting delivery targets. The financial performance measure which most concerns management is cost containment in a competitive business. Depot managers find they are expected to have regard to customer delivery targets and cost control.

My first task in advising the company was to contact a benchmarking expert in order to find out as much as possible about the competition. The expert had plenty of information on non-financial targets, including surveys undertaken by consumer organisations. The expert also had a broad outline of the cost structure of the leading operator in the field, which regards itself as a very well-controlled business.

Fiona emphasises here the importance of a **strategic management** approach, looking beyond the organisation, and of understanding the effective limits on targets where there is an established leader in the field. In the next section she explains how the targets were set at a level which would be acceptable to depot managers while meeting customers' expectations.

23.7.2 Standards of performance

Standards may be set by an inward-looking process which builds on the management perception of the performance required to achieve desired goals. Demonstrating that such targets are achievable may require reference to the performance of previous time periods and of similar units elsewhere in the organisation. The competitive position of the organisation requires that standards are set by reference to performance in other organisations. That may be relatively difficult or relatively easy to obtain, depending on the relative secrecy or openness of the sector.

Fiona McTaggart continues her description:

After collecting all the information available, senior management decided they wanted depot managers to concentrate on: (a) performance as a profit centre; (b) delivery targets; and (c) sales and customer care. The system is now in place.

Performance as a profit centre requires targets for sales and costs. Each depot had initial targets set by reference to average performance over the past three years. The national reporting of target achievement is achieved by concentrating on percentages above and below target.

Delivery targets are reported according to the depot which last handled a parcel before it reached the customer. However, where a delivery target is not met, it is permissible for the depot manager to produce a summary of documentation showing where a previous depot in the chain caused a delay. These summaries are reviewed by head office and a supplementary report prepared showing bottleneck situations.

Customer care is monitored by customer feedback questionnaires. These are sent out by head office and collected there. The questions concentrate on delivery target time, condition of parcel, attitude of company personnel and perceived value for money. Depot summary reports are prepared.

Weekly reports are provided for depot managers which summarise the performance of the specific depot and show rankings against other depots. A narrative commentary by the managing director makes specific mention of the highest and lowest performers and explains how well the company is performing in relation to competitors.

Fiona has indicated that a mixture of financial and non-financial performance measures is used to create a part of the Balanced Scorecard. In the next section she comments on the rewards and penalties.

23.7.3 Rewards and penalties

If there are no rewards and no penalties it may be difficult to motivate employees in relation to performance targets. One view is that self-satisfaction in personal attainment is sufficient reward. Equally it could be argued that personal shame in not achieving a target would be sufficient penalty. However, more may be required.

Rewards and penalties are often difficult to administer because they involve human relations. The input of the individual must be seen in the context of the contribution of a team. Achieving a goal of the organisation may require team effort where it is difficult to identify the relative contributions of each member of the team. That may be overcome in relation to rewards by ensuring that no team member is deprived of a reward. Application of penalties, however, is more difficult because employment law generally seeks to protect employees against unjust treatment.

Rewards and penalties are linked to motivation. It has been suggested by experts in the theory of motivation that there are different needs at different levels of employment. Initially the employee is seeking the basic satisfaction of food and shelter which a paid job provides. A secure job provides safety in the longer term. Working in an organisation with clear goals provides the security of membership of a group. Developing personal potential in meeting performance targets leads to rewards of respect and praise. Taking a lead in meeting the goals of the organisation is evidence of realising one's potential. Studies of motivation have at various times emphasised achievement, recognition, challenge and promotion as aspects of rewards which motivate. Fairness (equity) is also seen as important, as is meeting expectations.

Fiona McTaggart completes her description of performance measurement in a transport company:

As I have already mentioned, the managing director writes a weekly letter to all depot managers noting in particular the best and worst performers. That gives a sense of achievement to some managers and perhaps shames others into moving up from the bottom of the league tables. There is also a real reward of an all-expenses-paid weekend break holiday for the best-performing manager over the year. The difficulty with league-table-type performance is that someone necessarily has to be bottom of the league, so while this system is motivating in a competitive sense, it has some negative aspects in that the performance measures are relative to other depots rather than relative to achievable targets. I have pointed out to the managing director that there may be some demotivating aspects to this system but he is very keen on competition and survival of the fittest.

Fiona has indicated that using performance targets for motivation is not an easy matter and depends very much on the personalities involved.

23.8 Summary

Key themes in this chapter are:

- **Feed forward control** means making predictions of outputs expected at some future time and then quantifying those predictions, in management accounting terms.
- **Feedback control** involves comparing outputs achieved against outputs desired and taking corrective action if necessary.
- A **responsibility centre** is an area of responsibility which is controlled by an individual. It might be a cost centre, a profit centre or an investment centre.
- The key questions to ask in designing a performance report are: To whom should the report be addressed? What should be reported? and How frequently should the report be presented?
- The key stages in **performance evaluation** are: decide on what to measure; plan how to report; and consider the behavioural aspects.
- It is important to distinguish **controllable** from **non-controllable** costs when seeking to establish responsibility for costs.

- **Benchmarking** is the name given to the process of measuring the organisation's operations, products and services against those of competitors recognised as market leaders, in order to establish targets which will provide a competitive advantage.
- **Non-financial performance measures** should cover both quantity and quality of performance. The measures should be related to the procedures under consideration.
- A **Balanced Scorecard** has four perspectives (Customer perspective; Financial perspective; Internal business perspective; and Learning and growth perspective).

Further reading

CIMA (2002) *Latest Trends in Corporate Performance Measurement*, Technical Briefing, Chartered Institute of Management Accountants, download available on website www.cimaglobal.com

Kaplan, R. S. and Norton, D. P. (2001) 'Transforming the Balanced Scorecard from Performance Measurement to Strategic Management: Part I', *Accounting Horizons*, 15(1): 87–104.

Kaplan, R. S. and Norton, D. P. (2001) 'Transforming the Balanced Scorecard from Performance Measurement to Strategic Management: Part II', *Accounting Horizons*, 15(2): 147–60.

Simons, R. (2000) *Performance Measurement and Control Systems for Implementing Strategy*, Prentice Hall.

QUESTIONS

The Questions section of each chapter has three types of question. 'Test your understanding' questions to help you review your reading are in the 'A' series of questions. You will find the answers to these by reading and thinking about the material in the book. 'Application' questions to test your ability to apply technical skills are in the 'B' series of questions. Questions requiring you to show skills in problem solving and evaluation are in the 'C' series of questions. A letter [S] indicates that there is a solution at the end of the book.

A Test your understanding

A23.1 Define 'feedback control'. (Section 23.1)

A23.2 Define 'feed forward control'. (Section 23.1)

A23.3 Define 'responsibility centre'. (Section 23.1)

A23.4 What are the three basic questions to be asked in relation to report preparation? (Section 23.2)

A23.5 How does an organisation decide on the frequency of internal reporting? (Section 23.2.3)

A23.6 What is required of the management accountant in carrying out performance evaluation? (Section 23.3)

A23.7 Define a 'controllable cost'. (Section 23.3.2)

A23.8 Define a 'non-controllable cost'. (Section 23.3.2)

A23.9 Define an 'avoidable cost'. (Section 23.3.2)

A23.10 Define an 'unavoidable cost'. (Section 23.3.2)

A23.11 What are the behavioural aspects of performance evaluation? (Section 23.3.3)

A23.12 Explain what is meant by 'benchmarking'. (Section 23.4)

A23.13 Explain the meaning of 'non-financial performance measures'. (Section 23.5)

A23.14 Give two examples of quantitative non-financial performance measures. (Section 23.5.1)

A23.15 Give two examples of qualitative non-financial performance measures. (Section 23.5.2)

A23.16 What are the four main aspects of a Balanced Scorecard? (Section 23.6)

A23.17 Give one example of a goal and one example of a matching measurement, for each of the four main aspects of a Balanced Scorecard. (Section 23.6)

A23.18 What are the benefits and problems of linking rewards and penalties to a performance measurement system in an organisation? (Section 23.7.3)

B Application

B23.1
Suggest six non-financial performance measures for a company which offers contract gardening services to companies which have landscaped sites surrounding their offices. Give reasons for your choice.

B23.2
Suggest three financial and three non-financial performance measures for a business which provides training in the workplace for updating wordprocessing and computing skills. Each training course lasts two weeks and there is a standard fee charged per trainee.

B23.3
Design a Balanced Scorecard for a restaurant business which owns three restaurants in the same town. Include three goals and three measurements of performance for each of the four aspects of the Balanced Scorecard, and write a short note justifying your choices.

C Problem solving and evaluation

C23.1 [S]
Standard pine benches are assembled and packed in the bench assembly department of Furniture Manufacture Ltd. The department is treated as a cost centre. Control reports prepared every month consist of a statement comparing actual costs incurred in the department with the level of costs which was budgeted at the start of the month.

For the month of June Year 6 the following control report was produced, and received favourable comment from the directors of the company.

Bench Assembly Department
Control Report for June Year 6

	Budgeted cost			*Actual cost*	*Variance*[1]	
	Fixed	*Variable*	*Total*			
	£	£	£	£	£	
Direct labour	–	36,000	36,000	30,000	6,000	(F)
Indirect labour	6,000	8,000	14,000	14,000	–	
Indirect materials	–	4,000	4,000	3,500	500	(F)
Power	3,000	12,000	15,000	9,000	6,000	(F)
Maintenance materials	–	5,000	5,000	3,000	2,000	(F)
Maintenance labour	5,000	4,000	9,000	15,000	6,000	(A)
Depreciation	85,000	–	85,000	75,000	10,000	(F)
Production overhead	–	20,000	20,000	15,000	5,000	(F)

Note: [1] (F) = favourable; (A) = adverse.

Due to a power failure, the level of production achieved was only 75% of that expected when the budget was prepared. No adjustment has been made to the original budget because the departmental manager claims that the power failure which caused the loss of production was beyond his control.

Required

Prepare a memorandum to the directors of the company:

1 Explaining the weaknesses in the existing form of control report.
2 Presenting the control report in such a way as to give a more meaningful analysis of the costs.
3 Assessing the performance of the Bench Assembly Department during the month.

C23.2 [S]

Dairies Ltd operates a milk processing and delivery business. The retail distribution of milk is controlled by a regional head office which has overall responsibility for five geographical distribution areas. Each area is run by an area manager who has responsibility for ten depots. At each depot there is a depot manager in charge of 20 drivers and their milk floats. Milk is bottled at a central processing plant and sent to depots by lorry.

All information regarding the operation of each depot and each area office is sent to the divisional head office accounting department. This department produces weekly reports to be sent to each depot manager, each area manager and the manager of the distribution division.

A pyramidal system of reporting is in operation whereby each manager receives an appropriate weekly report containing the financial information on the operations for which he is responsible.

Required

1 Explain what is meant by responsibility accounting.
2 List, giving reasons, the information which should be contained in the weekly reports to each of the three levels of manager specified.

C23.3

You are the management accountant at the head office of a company which owns retail shoe shops throughout the country. The shops are grouped into areas, each having an area manager. Goods for sale are bought through a central purchasing scheme administered by head office. Shop managers have discretion to vary sales prices subject to the approval of the area manager. It is the responsibility of shop managers to record on a wastage sheet any shoes which are discarded because of damage in the shop. Shop managers have total control over the number of staff they employ and the mix of permanent and casual staff, subject to interview in the presence of the area manager. Shop managers also arrange for cleaning of the premises and are responsible for heat and light and other overhead costs.

The head office accounting system has produced the following information with regard to the Southern area:

	Shop A £	*Shop B* £	*Shop C* £	*Area target* %
Turnover	450,000	480,000	420,000	100
Costs:				
Cost of goods sold	355,000	356,000	278,000	69
Wastage	5,000	4,000	2,000	
	360,000	360,000	280,000	
Salaries and wages:				
Branch manager	15,000	16,000	16,000	
Bonus for manager	1,000	1,500	1,500	
Permanent assistants	9,000	7,000	7,000	
Bonus for assistants	450	480	420	
Casual workers	3,000	4,000	5,000	
	28,450	28,980	29,920	6
Heat, light, cleaning and other overheads	7,600	8,500	8,200	2
Operating profit before area office recharges	53,950	82,520	101,880	
Area office recharges	3,000	3,000	3,000	
	50,950	79,520	98,880	22

Further information

(a) The Southern area has an overall operating profit target of 20% of sales. The area office has a target allowance of 2% of sales to cover its expenses other than those recharged to shops.

(b) Details of area office expenses are:

	£
Area manager's salary	18,000
Area manager's bonus	3,000
Other office expenses	2,400
	23,400
Area office recharges	(9,000)
	14,400

(c) It is the policy of the company to disclose sufficient information to motivate and inform the appropriate level of management or staff, but to avoid reporting excessive detail, particularly where such detail would unnecessarily disclose information about wages or salaries of individual employees.

Required

Prepare three separate reports including comments on and interpretation of the quantitative performance data as follows:

1 To the area manager on the overall performance of the area and the relative performance of each shop within the area.

2 To the manager of shop A on the performance of that shop relative to the rest of the area and to the area target.

3 To the employees of shop B showing them how their shop performed relative to the rest of the area.

Cases for study groups

Case 23.1

Lightwave Radio Ltd produces a range of products at its assembly plant. Due to recent rapid expansion the company's system of management control is now inadequate. The board has established a working party drawn from all disciplines of management to develop the structure for a new computer-based management control and reporting system.

As chief accountant, you represent the finance department on the working party and believe that the management reporting system should be based on the division of the production process into a series of cost centres.

Required

(a) Explain the essential features of a cost centre.
(b) Identify the main features you would expect to find in a cost control report prepared for use at individual cost centre level.
(c) List three objections or questions which you might anticipate receiving from other members of the working party, and explain how you would answer each.

Case 23.2

You are the managing director of Combine Ltd, a company engaged in the manufacture and sale of refrigerators and freezers. The board of directors has agreed to reorganise the company into two divisions – the domestic refrigerator division and the industrial freezer division. At the next board meeting the measures to be used to monitor management performance are to be discussed.

Prepare a five-minute presentation to your fellow directors which explains:

- the key factors to be considered in the design of financial performance measures for the divisional managers; and
- the use of non-accounting measures for appraising short-term divisional management performance.

Suggest three examples of non-accounting measures which could be used to monitor sales performance in the company.

Case 23.3

Obtain the annual report of a large listed company. Look throughout the report for mention of non-financial performance indicators. Having read the report, prepare a list of non-financial performance indicators which you think would be useful to readers in understanding more about the company. For each indicator suggested, you should give a reason. The aim should be to have a table of indicators covering no more than one side of A4 paper in printed form.