

Chapter

# 17

## Management control – 1



## 17.1 Learning objectives

When you have read this chapter you should be able to:

- (a) understand the nature of control and the control process;
- (b) appreciate some different approaches to control;
- (c) appreciate the importance of the behavioural aspects of control;
- (d) design basic control systems.

## 17.2 Introduction to control

Since control is a process whereby management ensures that the organization is achieving desired ends, it can be defined as a set of organized (adaptive) actions directed towards achieving specified goals in the face of constraints.

To bring about particular future events, it is necessary to influence the factors that lie behind those events. It is the ability to bring about a desired future outcome at will that is the essence of control. In this sense it can be seen that control itself is a *process* and not an event. Moreover, the idea of control can be seen to be synonymous with such notions as adaptation, influence, manipulation and regulation. But control is *not* synonymous with coercion in the sense in which the term is used in this book. Nor does it have as its central feature (as so often seems to be thought) the detailed study of past mistakes, but rather the focusing of attention on current and, more particularly, on future activities to ensure that they are carried through in a way that leads to desired ends.

The existence of a control process enables management to know from time to time where the organization stands in relation to a predetermined future position. This requires that progress can be observed, measured and redirected if there are discrepancies between the actual and the desired positions.

Control and planning are complementary, so each should logically presuppose the existence of the other. Planning presupposes objectives (ends), and objectives are of very limited value in the absence of a facilitating plan (means) for their attainment. In the planning process, management must determine the organization's future courses of action by reconciling corporate resources with specified corporate objectives in the face of actual, and anticipated, environmental conditions. This will usually involve a consideration of various alternative courses of action and the selection of the one that is seen to be the best in the light of the objectives.

In seeking to exercise control it is important to recognize that the process is inevitably value laden: the preferred future state that one is seeking to realize is unlikely to be the same for individual A as for individual B, and that which applies to individuals also, within limits, applies to organizations.

In seeking to exercise control the major hindrances are uncertainty (since the relevant time horizon for control is the future, which cannot be totally known in advance)

and the inherent complexity of socio-economic and socio-technical systems (such as business organizations). If one had an adequate understanding of the ways in which complex organizations function, and if this facilitated reliable predictions, then the information stemming from this predictive understanding would enable one to control the organization's behaviour. In this sense it can be seen that information and control have an equivalence.

Behind the presumption, therefore, that we can control anything there is an implied assertion that we know enough about the situation in question (e.g. what is being sought, how well things are going, what is going wrong, how matters might be put right, etc.).

### 17.3 Control defined

There are as many different definitions of control, and of management control, as there are authors.

Maciariello (1984, p. 5), for example, offers the following definitions of management control (MC) and a management control system (MCS):

“Management control is the process of ensuring that the human, physical, and technological resources are allocated so as to achieve the overall purposes of an organization. An MCS attempts to bring unity of purpose to the diverse efforts of a multitude of organizational subunits so as to steer the overall organization and its managers toward its objectives and goals. An MCS consists of a structure and a process.”

A control system's structure has relative permanence and focuses on what the system is (i.e. the designated responsibility centres, delegated authority, performance measures, etc.). Its process focuses on the way in which decisions are made to establish goals, allocate resources, evaluate performance, revise strategies, etc., in a purposive manner.

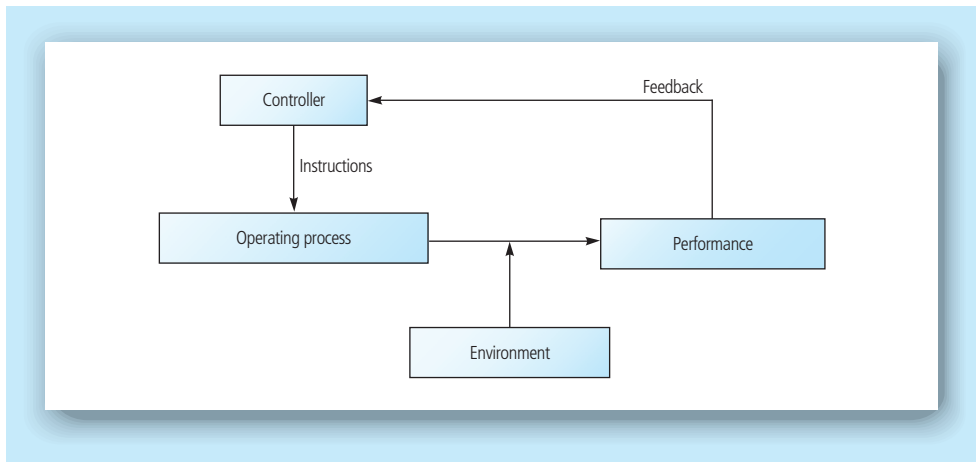
Itami (1977) emphasized the fact that management control is control within an organizational context, which implies that it is of a multi-person nature. This is also evident in Tannenbaum's (1964, p. 299) definition of control as being:

“... any process in which a person (or a group of persons or organization of persons) determines or intentionally affects what another person or group or organization will do.”

However, the idea of interpersonal influence was broadened by Hofstede (1968, p. 11) to embrace impersonal control also:

“Control within an organizational system is the process by which one element (person, group, machine, institution or norm) intentionally affects the action of another element.”

The interpersonal nature of control within organizations needs to be recognized in order to relate to motivation, goal congruence and the reward system. In Figure 17.1 there is no explicit recognition of this requirement, whereas Figure 17.2 allows for it via 'nesting'. Within the nested model the superior exercises control by influencing the subordinate's



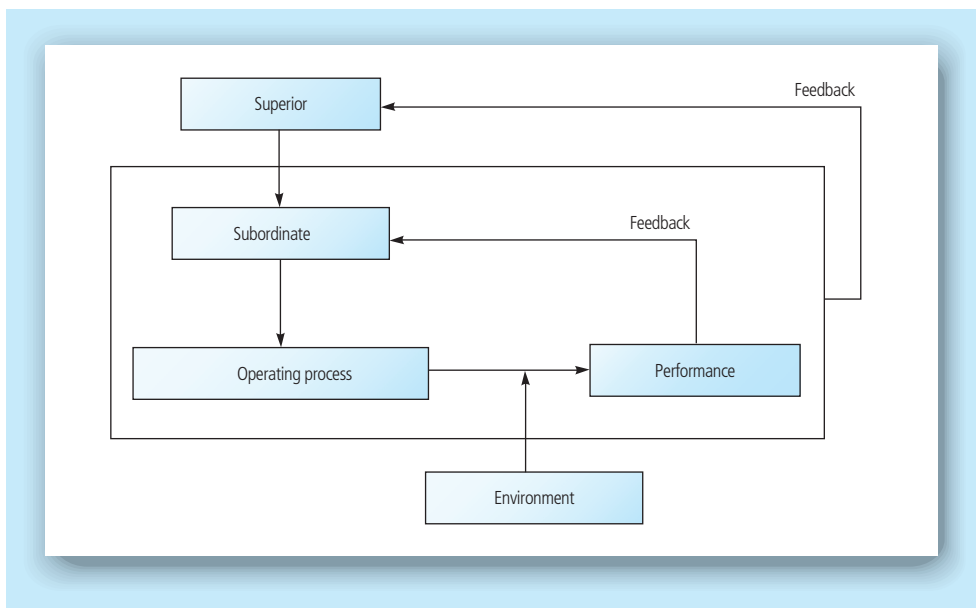
**Figure 17.1** The control process

behaviour – largely through the assessment of the subordinate’s performance against agreed plans.

The behavioural aspect is highlighted by Merchant (1985, p. 4; 1998), who also refers to the strategic aspects of control:

*“Control is seen as having one basic function: to help ensure the proper behavior of the people in the organization. These behaviors should be consistent with the organization’s strategy . . .”*

The need for control arises because individuals within the organization are not always willing to act in the organization’s best interests.



**Figure 17.2** A nested model of control systems

Whilst strategy may be seen as being related to control, it is usually separable. Thus, it is possible for an enterprise having good strategies to fail because it has a poor control system, and vice versa. In general, however, the better the formulation of a strategy, the greater will be the number of feasible control alternatives and the easier their implementation is likely to be.

Anthony (1988, pp. 7 and 10) also refers both to the links between control and strategic implementation on the one hand, and the interaction among individuals on the other:

“Control is used in the sense of assuring implementation of strategies. The management control function includes making the plans that are necessary to assure that strategies are implemented.”

“Management control is the process by which managers influence other members of the organization to implement the organization’s strategies.”

Merchant (1985, p. 1) has pointed out a number of problems that have inhibited a greater understanding of control:

- 1 The lack of a comprehensive and generally accepted control framework with supporting terminology
- 2 Control problems and solutions are discussed at different levels of analysis
- 3 The solutions that are proposed also differ in accordance with the orientation of their proposers
- 4 Some authors argue that control should deal with (historical) facts, whereas others argue that control should be future-oriented.

## 17.4 Basic control concepts

In this section, which draws on Wilson and Chua (1993), we will distinguish between *open-loop control* and *closed-loop control*.

We shall also distinguish between two main forms of closed-loop control: *feedforward control* and *feedback control*.

### Open-loop control

This form of control exists when an attempt is made by a system (for example, an organization) to achieve some desired goal, but when no adjustments are made to its actions once the sequence of intended acts is under way. A very simple example is that of a golfer hitting a golf ball: his aim is to get the ball into the hole, and with this in mind he will take into account the distance, the hazards, and so forth, prior to hitting the ball. Once the ball is in the air there is nothing that the golfer can do but hope that he did things right.

Two possible refinements to the basic open-loop model are:

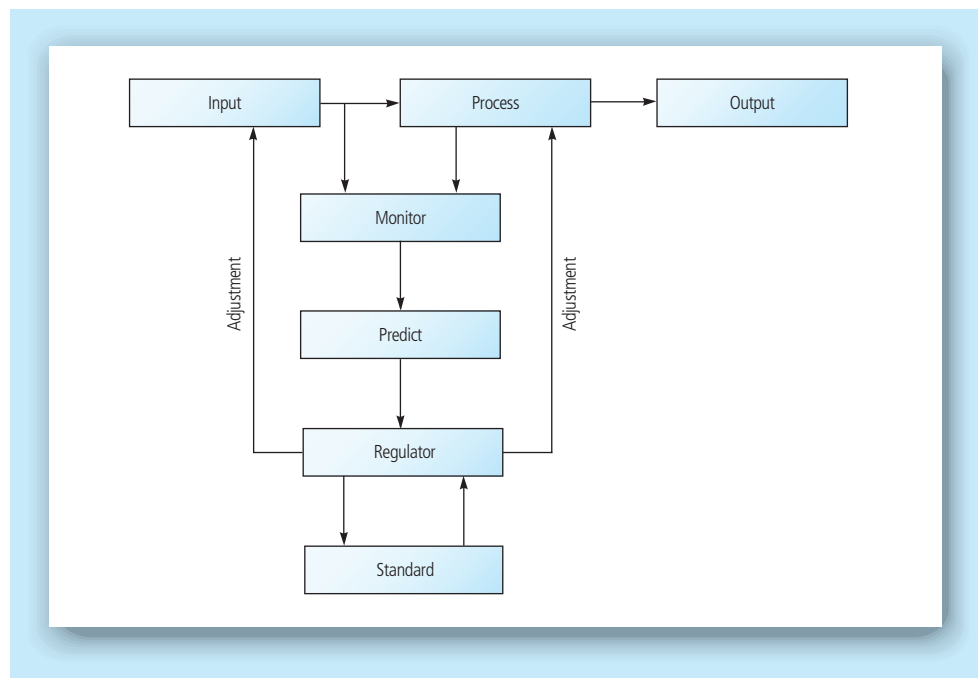
- 1 To introduce a monitoring device for the continual scanning of both the environment and the transformation process of the system (that is, the process by which the organization converts inputs into outputs). This will provide a basis for modifying either initial plans or the transformation process itself if it appears that circumstances are likely to change before the plan has run its course and the goal realized. This is *feedforward control* and is illustrated in Figure 17.3.
- 2 To monitor the outputs achieved against desired outputs from time to time, and take whatever corrective action is necessary if a deviation exists. This is *feedback control* and is illustrated in Figure 17.4.

Both feedback and feedforward control entail linking outputs with other elements within the system, and this explains why they are termed *closed-loop* control systems.

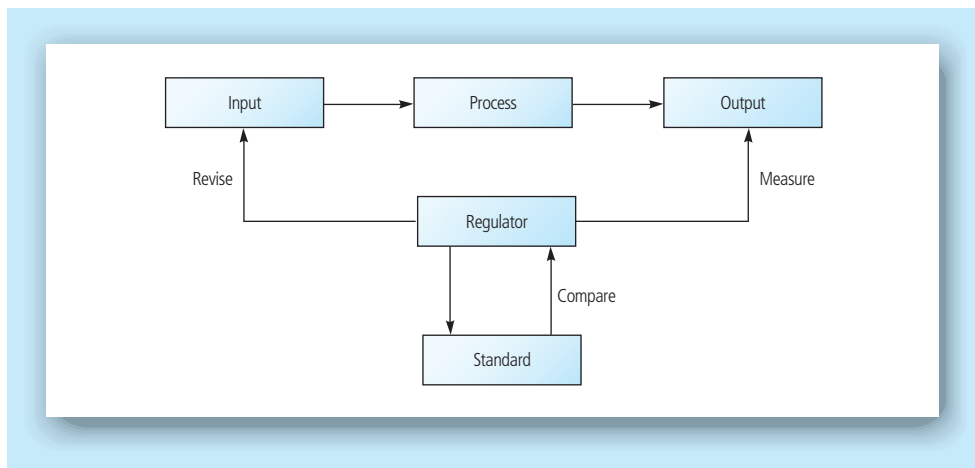
### Closed-loop control

In an open-loop system errors cannot be corrected as it goes along, whereas likely errors can be anticipated and steps taken to avoid them in a feedforward control system, and actual errors along the way can be identified and subsequent behaviour modified to achieve desired ends in a feedback control system.

The inadequacy of open-loop systems as a basis for organizational control (and hence for the design of MCS) largely stems from our limited knowledge of how



**Figure 17.3** A feedforward control system



**Figure 17.4** A feedback control system

organizational systems operate, which in turn reflects the complexity of organizations and their environments, plus the uncertainty that clouds the likely outcome of future events. If we possessed a full understanding of organizational processes and had a perfect ability to predict the future, then we would be able to rely on open-loop systems to achieve the ends we desire, since we would be able to plan with the secure knowledge that our plans would be attained due to our perfect awareness of what was going to happen, and how, and when (i.e. control action would be independent of the system's output).

In our current state of awareness we must rely on closed-loop systems, whether feed-forward or feedback, in which control action is dependent upon the actual or anticipated state of the system.

It is helpful to think of four types of outcome in connection with the application of closed-loop systems to the problem of organizational control. These are:

$S_0$  = Initial *ex ante* performance (e.g. a budget based on a set of expectations that might include: inflation at 5 per cent per annum; market growth of 10 per cent per annum; no labour disputes).

$S_1$  = Revised *ex ante* performance (e.g. an updated budget that has taken into account the experience of operating the system to date).

$S_2$  = *Ex post* performance (e.g. a revised budget based on what should have been achieved in the circumstances that prevailed during the period in question, say: inflation at 7 per cent per annum; market growth of 12 per cent per annum, and a strike lasting three weeks).

$A_0$  = Observed performance (i.e. that which actually occurred).

An organization's forecasting ability is shown by  $A_0 - S_0$  (under feedback control) and, more precisely, by  $A_0 - S_1$  (under feedforward control). The extent to which the organization is not using its resources to maximum advantage (its opportunity cost of operating) is given by  $A_0 - S_2$ .

A feedforward control system will function in a way that keeps revising  $S_0$  as events are proceeding, with a view to producing an eventual outcome in which  $A_0 = S_1$ . On the other hand, a feedback control system will, from time to time, compare  $A_0 - S_0$ , and  $S_0$  will only be revised if a discrepancy has been experienced.

It is apparent that feedforward control tends to be:

- ➔ *Ex ante*
- ➔ Proactive
- ➔ Continuous

and seeks to predict the outcomes of proposed courses of action, while feedback control tends to be:

- ➔ *Ex post*
- ➔ Reactive
- ➔ Episodic.

Let us look at each a little more closely.

### Feedforward control

A feedforward system can be defined as:

“A measurement and prediction system which assesses the system and predicts the output of the system at some future date.”

(Bhaskar and Housden, 1985, p. 199)

This differs from a feedback system in that it seeks to anticipate, and thereby to avoid, deviations between actual and desired outcomes. According to Cushing (1982, p. 83), its components are:

- 1 An operating process (which converts inputs into outputs)
- 2 A characteristic of the process (which is the subject of control)
- 3 A measurement system (which assesses the state of the process and its inputs, and attempts to predict its outputs)
- 4 A set of standards or criteria (by which the predicted state of the process can be evaluated)
- 5 A regulator (which compares the predictions of process outputs to the standards, and which takes corrective action where there is likely to be a deviation).

For a feedforward control system to be effective it must be based on a reasonably predictable relationship between inputs and outputs (i.e. there must be an adequate degree of understanding of the way in which the organization functions).



Guidelines for developing feedforward control systems are as follows:

- 1 Thorough planning and analysis are required (reflecting as much understanding as possible about the links amongst inputs, process and outputs)
- 2 Careful discrimination must be applied in selecting those variables that are deemed to have a significant impact on output
- 3 The feedforward system must be kept dynamic to allow for the inclusion of new influences on outputs
- 4 A model of the system to be controlled should be developed and the most significant variables (along with their effects on process and outputs) defined within it
- 5 Data on significant variables must be regularly gathered and evaluated in order to assess their likely influence on future outcomes
- 6 Feedforward control requires action focused on the future (rather than on the correction of past errors).

### Feedback control

Feedback control should ensure self-regulation in the face of changing circumstances once the control system has been designed and installed. The essence of feedback control is to be found in the idea of *homeostasis*, which defines the process whereby key variables are maintained in a state of equilibrium even when there are environmental disturbances.

As a hypothetical illustration let us consider a company planning to sell 100 000 cassette players during the next 12 months. By the end of the third month it finds that the pattern of demand has fallen to an estimated 80 000 units due to the launch by another company of a competing product. After a further three months the competitor puts up the price of its product while the original company holds its own price steady, and this suggests that the level of demand may increase to 150 000 units. Feedback signals would ensure that the company is made aware, e.g. by monthly reports, of the actual versus planned outcomes (in terms of sales levels). The launch of the competitive cassette player would be identified as the reason why sales levels were below expectations in the early months, and the competitor's price increase would be identified as the reason why sales levels subsequently increased. In response to deviations between actual and desired results (i.e. feedback), an explanation needs to be found and actions taken to correct matters. Amending production plans to manufacture fewer (or more) cassette players, allowing inventory levels to fall (or rise) to meet the new pattern of demand, modifying promotional plans to counter competitive activities and so forth, could all stem from a feedback control system.

If deviations (or *variances* to give them their usual accounting name) are minor it is probable that the process could absorb them without any modifications, and inventory control systems, for example, are normally designed to accommodate minor variations between expected and actual levels of demand, with buffer stocks being held for this purpose. But in the case of extreme variations – such as the pattern of demand shifting

from 100 000 units to 80 000 and then to 150 000 – it will be necessary to amend the inputs in a very deliberate way once the causes of the variations have been established. Inevitably there are costs associated with variances, and these will tend to be proportional to the length of time it takes to identify and correct them.

Some principles for the proper functioning of a feedback control system can be suggested (e.g. Cushing, 1982, p. 80), and might include:

- ➔ The benefits from the system should be at least as great as the costs of developing, installing and operating it. This is the problem of ‘the cost of control’. It is often difficult to specify precisely either the benefits (other than in broad terms – e.g. ‘better customer service’, ‘increased efficiency’) or the costs relating to different system designs, but it should be possible to make approximate assessments of both.
- ➔ Variances, once measured, should be reported quickly to facilitate prompt control action. This is analogous to the feedback – known as *knowledge of results* – in psychological learning theory: if one has been tested on what one has learnt, it is important to be told quickly whether one is right (to reinforce the learning) or wrong (to facilitate remedial learning).
- ➔ Feedback reports should be simple, easy to understand, and highlight the significant factors requiring managerial attention.
- ➔ Feedback control systems should be integrated with the organizational structure of which they are a part. The boundaries of each process subject to control should be within a given manager’s span of control.

### Feedforward versus feedback control

The most significant features of feedforward and feedback control are shown in Figure 17.5. Feedback systems are typically cheaper and easier to implement than are feedforward systems, and they are more effective in restoring a system that has gone out of control. Their main disadvantage, however, is that they can allow variations to persist for as long as it takes to detect and correct them. Feedforward control systems, as we have seen, depend critically for their effectiveness on the forecasting ability of

| Characteristic         | Feedforward | Feedback |
|------------------------|-------------|----------|
| Low cost               |             | ✓        |
| Ease of implementation |             | ✓        |
| Effectiveness          |             | ✓        |
| Minimal time delays    | ✓           |          |
| Self-regulation        | ✓           | ✓        |

Figure 17.5 Relative strengths

those who must predict future process outputs. Both feedforward and feedback systems lend themselves to self-regulation.

The most effective approach to control comes from using the two approaches as complements, since few (if any) processes could be expected to operate effectively and efficiently for any length of time if only one type of control was in use. (For example, in controlling inventory, feedback data can be used in connection with stock-outs, rates of usage, etc., while feedforward data needs to be generated in gauging the raw material requirements for predicted levels of demand and the ability of suppliers to deliver on time.)

Both types of control are fundamentally intertwined with the design of MCS. In a feedback control system the functions that the system will carry out are:

- ➔ Standard setting
- ➔ Performance measurement
- ➔ Reporting of results.

Within a feedforward control system the role of the MCS will encompass:

- ➔ Standard setting
- ➔ Monitoring process inputs
- ➔ Monitoring operations
- ➔ Predicting process outputs.

The degree of overlap is modest relative to the degree of complementarity.

## 17.5 Responsibility accounting

In analysing organizations with a view to securing control over them, there are five key variables to which one must pay attention. A change in any one of these will have consequences for one or more of the others. These variables are:

- 1 The task of the organization (i.e. the purpose to be served by the outputs from the organization)
- 2 The technology of the organization (i.e. the means whereby the inputs are converted into outputs)
- 3 The structure of the organization (i.e. the roles, rules, etc.)
- 4 The people of the organization (including their expectations, career development, etc.)
- 5 The environment of the organization (i.e. those factors beyond the organization's boundary).

In this section we will be concerned with aspects of variable 3 – the structure, as reflected through individuals' assigned responsibilities.

If an enterprise is organized in such a way that lines of authority are clearly defined, with the result that each manager knows exactly what his or her responsibilities are and precisely what is expected of him or her, then it is possible to plan and control costs, revenues, profits, etc., in order that the performance of each individual may be evaluated and, one hopes, improved. In addition, a meaningful basis can be given to the design of the reporting system if it is geared to areas of responsibility.

That is the essence of responsibility accounting, which is a system of accounting that is tailored to an organization so that costs, revenues, profits, etc., can be planned, accumulated, reported and controlled by levels of responsibility within that organization. Responsibility accounting requires that costs, revenues and profits – as appropriate – be classified by:

- ➔ Responsibility centre
- ➔ Their degree of controllability within their responsibility centre (on the premise that each responsible individual in an organization should only be held accountable for those costs, revenues and profits for which he or she is responsible and over which he or she has control)
- ➔ Their nature.

This approach to classification will facilitate:

- ➔ Self-appraisal by lower and middle management
- ➔ Subordinate appraisal by top management
- ➔ Activity appraisal (by which top management might evaluate the performance of the overall range of corporate activities).

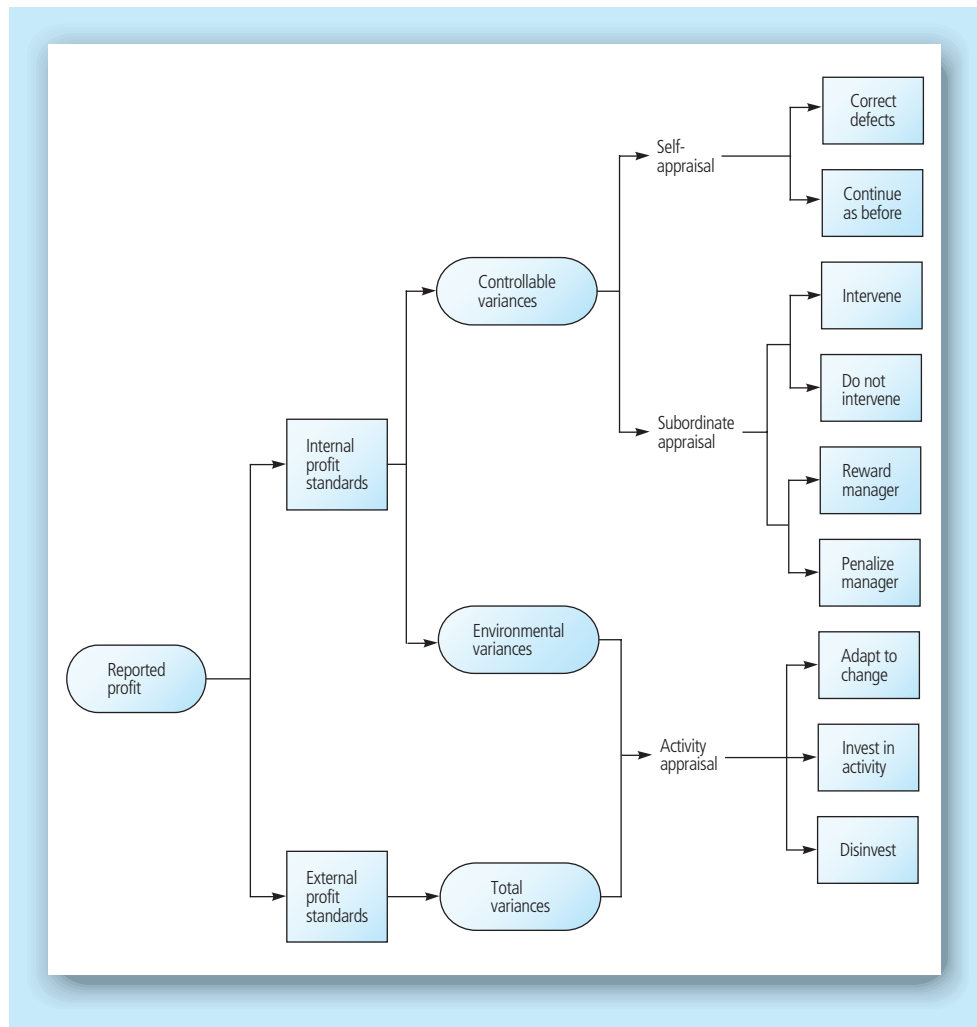
See Figure 17.6.

However, it is essential to the success of any control system that individuals are only held responsible for results when the following conditions prevail:

- 1 That they know what they are expected to achieve
- 2 That they know what they are actually achieving
- 3 That it is within their power to influence what is happening (i.e. that they can bring points 1 and 2 together).

When all these conditions do not occur simultaneously it may be unjust and ineffective to hold an individual responsible, and it will be impossible to achieve the desired level of organizational performance.

From the above comments it will be apparent that targets or results should be compiled in a way that reflects one individual's 'uncontaminated' performance. Thus, Manager A's budget should contain a clear set of items that are deemed to be controllable at his or her level of authority and a further set of items that are either fixed by company policy or are otherwise beyond Manager A's influence. These latter items are



**Figure 17.6** Appraisal of performance (source: Shillinglaw, 1964, p. 158)

uncontrollable from A's viewpoint, and his or her performance should not be assessed in relation to costs, etc., over which he or she has no control.

Costs (as well as revenues, profits, and so forth) can only be controlled if they are related to the organizational framework: in other words, costs should be controlled in accordance with the concept of responsibility – a cost should be controlled at whatever level it is originated and initially approved by the individual who did the initiating and approving. In this way it will be clear that certain costs are the responsibility of, and can only be controlled by, the chief executive of a company (such as corporate public relations expenditure), whereas others are controllable by responsible individuals at lower levels of the organizational hierarchy (e.g. a departmental manager will be responsible for the salary expense of those who work within his or her department). It is important to distinguish between costs that are controllable at a given level of managerial authority within a given period of time and those that are not. This distinction is not the same as the one between variable costs and fixed costs. For example, rates are a fixed cost that are

uncontrollable, for a given time period, by any managerial level, whereas the annual road licence fee for a particular vehicle is a fixed cost that is controllable by the fleet manager, who has the power to dispense with the vehicle. In the same way the insurance premium payable on inventories is a variable cost (fluctuating with the value of the inventory from month to month) that is not controllable at the storekeeper level, but it is controllable at the level of the executive who determines inventory policy (subject, of course, to the environmental vagaries of such factors as consumer demand, which can never be removed).

Controllability is affected by both managerial authority and the element of time – a short-run fixed cost will be a long-run variable cost. (Thus, the managing director's salary is fixed for 12 months but variable thereafter.) All costs are controllable to some extent over the longer term, even if this involves a change in the scale of operations or a relocation of the company.

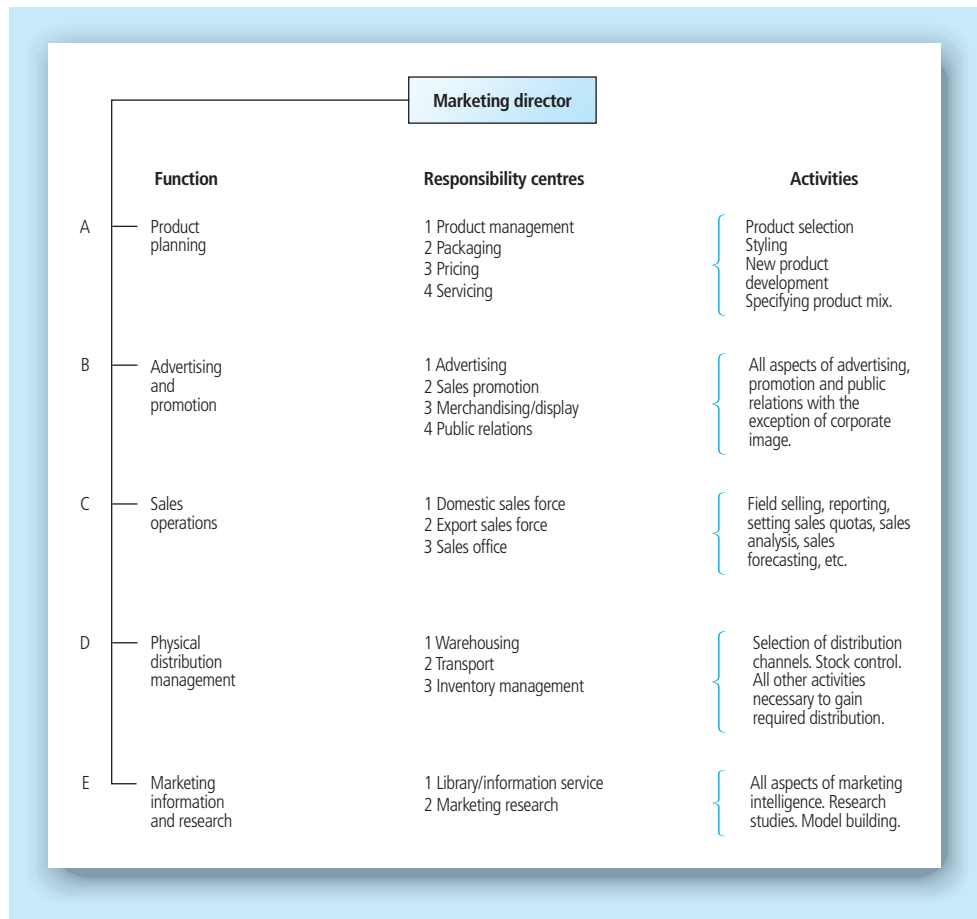
The problem of distinguishing between controllable and uncontrollable costs is more difficult in relation to indirect as opposed to direct costs. It is vitally important that costs be regulated at source, and this means that for many indirect items the beneficiary of cost incurrence is very often not the person to be charged with the cost. Obvious examples are central services – maintenance, the personnel department, post room/switchboard facilities – from which all members of the company derive benefits but for which cost responsibility is accorded to the respective supervisors and managers of these service functions.

To sum up so far, the approach to control that is based on the concept of responsibility accounting involves designing the control system to match the organizational structure in order that it reflects realistically the responsibilities of departmental managers, supervisors, etc. (This method of tackling control permits the collecting and reporting of data in such a way that the performance of organizational subunits can be evaluated.) In devising a control system for securing control that accords with the organizational structure, it will usually be found necessary to define more closely the duties of responsible individuals, and various responsibilities will have to be reassigned in order to give a logical structure to an organization that may have grown in a haphazard manner. All subsequent organizational changes that lead to changes in individual responsibilities should be accompanied by suitable modifications to the control system.

Organizational charts are useful if properly detailed. Apart from showing the chain of command (i.e. who reports to whom), such a chart should also include a schedule defining the duties of those individuals and any limitations to their authority. In this way responsibilities can be unambiguously assigned, and this knowledge clearly communicated to all concerned. Figure 17.7 represents a possible marketing organization structure, giving details of duties within each functional area.

The implications of fixing responsibility and of implementing control via responsibility centres are:

- ➔ The organizational structure must be clearly defined and responsibility delegated so that each person knows his or her role
- ➔ The extent and limits of functional control must be determined



**Figure 17.7** Marketing organization structure

- ➔ The responsible individuals should be fully involved in preparing plans if they are to be held responsible for results
- ➔ Responsible individuals must be serviced with regular performance reports
- ➔ Means must be established to enable plans to be revised in line with actual performance in such a way that responsible individuals are involved
- ➔ Every item should be the responsibility of some individual within the organization.

The ability to delegate is one sign of a good manager and responsibility accounting facilitates this. The act of passing responsibility down the line to the lowest levels of supervision gives these advantages:

- 1 It helps to create an atmosphere of cost consciousness throughout the organization
- 2 It tends to get control action quickly without delays resulting from the need for a senior executive to receive a monthly report before decisions can be made
- 3 It helps to give all levels of management a sense of team spirit with a common purpose.

A central notion in considering control is the evaluation of performance – whether *ex ante* (as in feedforward control) or *ex post* (as in feedback control). This can be undertaken at several levels: at the societal level, at the level of the enterprise as a whole, at the level of a division or other segment – such as activities, or at the levels of the group or individual. In essence, what is required is a comparison of desired outcomes with expected or actual outcomes, an assessment of any divergences, and proposals for future courses of action. Putting this another way, three questions need to be posed:

- 1 What has happened?
- 2 Why has it happened?
- 3 What is to be done about it?

The need to view performance evaluation within a control context is highlighted by our posing all three questions, rather than just the first two.

The concept of performance measurement is a simple one to comprehend but it can only be put into practice if plans are carefully prepared before decisions are made. In the absence of a plan (expressed in terms of standards and budgeted levels of performance), there is no benchmark for evaluating the performance of segments of an enterprise, individuals in responsible positions or the organization as a whole, and attempting to improve upon it. The existence of standards of performance eliminates many of the opportunities and excuses for poor performance, and provides a reference point for improvements.

Measuring the performance of the various types of responsibility centre (i.e. cost, profit and investment) will usually focus on financial aspects of an organization's activity. This will not always be appropriate, although it tends to be the general case that managers are held accountable in terms of quantifiable performance rather than performance that is qualitative (such as employee morale or public relations). It is necessary to know from time to time how actual performance compares with desired performance, and this chapter focuses on this issue.

This comparison answers the question about *what* is happening, and responsibility accounting ensures that managers know *who* is to be accountable. Establishing *why* divergences occur is problematic, as is the question of deciding *how* to apply corrective action in order that control may be effective.

Individuals learn through assessing their experience and organizations learn through their members. However, the extent to which individuals – and thus organizations – can learn is constrained by the rules of the organization (governing decision-making, delegation, membership and other restrictions). Dery (1982) has pursued this question by focusing on the links between erring (e.g. when variances arise) and learning. His argument is as follows:

- 1 The recognition of errors is a function of interpretation rather than simply an observation of events – it requires that desired and actual outcome be compared and interpreted before one can assert that an error exists



- 2 The interpretation of events is influenced by organizational rules, etc., which also serve to constrain the extent to which learning can take place
- 3 It is insufficient to assume that better learning at the organizational level can stem from the learning ability of individual members, since the latter is constrained by the rules of the former; hence an additional factor is required that will change the organization's rules.

The level of performance of a responsibility centre from a control viewpoint can be evaluated by obtaining answers to three pairs of questions:

*Quantity*

- ➔ How much was accomplished?
- ➔ How much should have been accomplished?

*Quality*

- ➔ How good was that which was accomplished?
- ➔ How good should it have been?

*Cost*

- ➔ How much did the accomplishment cost?
- ➔ How much should it have cost?

Performance measurement presupposes a standard of comparison. An obvious example comes from the comparison of actual results with budgeted results – the latter being the predetermined standard of performance. Standards can be compiled for almost every business activity, such as:

- ➔ Number of customer complaints
- ➔ Production costs
- ➔ Unit costs of handling and transporting products
- ➔ Market share
- ➔ Employee turnover
- ➔ Downtime
- ➔ Unfilled orders
- ➔ Return on investment
- ➔ Percentage of late deliveries of orders
- ➔ A variety of cost/revenue/profit ratios.

Any standard can only be an effective aid to control if it is seen to be equitable: those who are being judged (i.e. the responsible individuals whose performance is being measured) must be consulted in the setting of standards, otherwise no attempt may be

made to reach them if they are considered to be either too high or too low. This ruins any attempt to control.

Luck and Ferrell (1979) have portrayed the links among marketing strategy, plans and standards as shown in Figure 17.8.

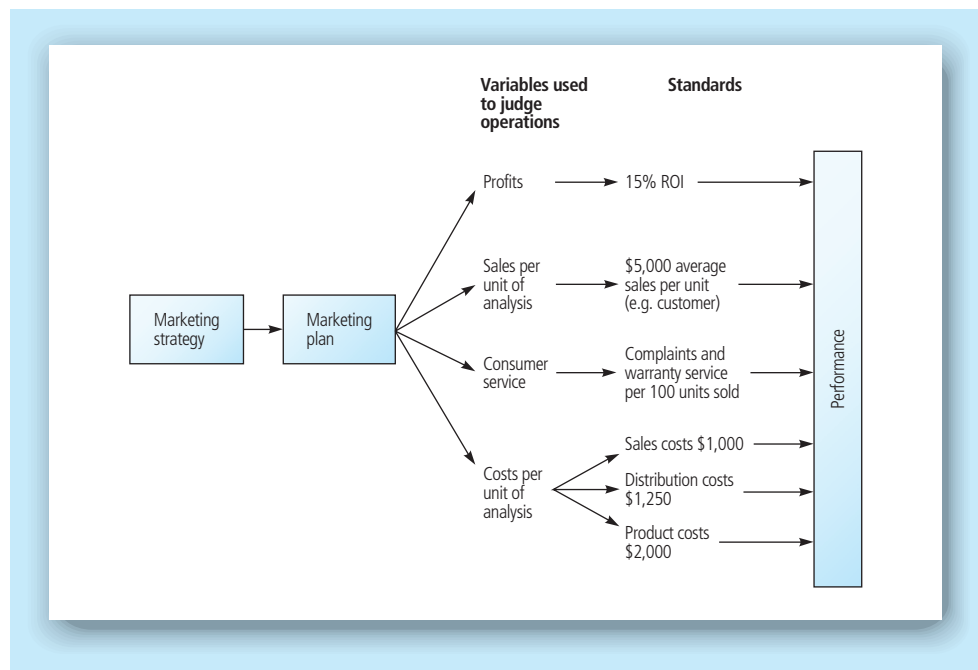
Control reports should be suited to the various areas of individual responsibility and as one moves further up the managerial hierarchy more items will be contained, albeit in summary form, in reports prepared for each level, since more items are controllable as the scope of managerial responsibility increases. Top management will therefore receive a summary of all items of income and expenditure.

Such summary reports can do little to rectify past mistakes, but by indicating exceptions to plans they can ensure that causes are investigated and appropriate corrective actions are taken to help in preventing future mistakes. The appropriate orientation should clearly be to the future rather than to the past.

A *responsibility centre* is made up of the various cost, revenue and investment items as appropriate for which a given individual is responsible. It is consequently a personalized concept that may be made up of one or more of the following:

- ➔ A cost centre
- ➔ A profit centre
- ➔ An investment centre.

Let us look at each of these in turn.



**Figure 17.8** Standards in the marketing control process (adapted from Luck and Ferrell, 1979, p. 421)

### A cost (or expense) centre

This is the smallest segment of activity, or area of responsibility, for which costs are accumulated. In some cases the cost centre may correspond with a department, but in others a department may contain several cost centres.

A cost centre may be created for cost control purposes whenever management feels that the usefulness of accumulating costs for the activity in question justifies the necessary effort.

Only input costs are measured for this organizational unit: even though there is some output this is not measured in revenue terms. Thus, a distribution team may deliver X units at a given total (or unit) cost, with the output being expressed either as a quantity or in terms of input costs.

### A profit centre

This is a segment, department or division of an enterprise that is responsible for both revenue and expenditure. This is the major organizational device employed to facilitate decentralization (the essence of which is the freedom to make decisions). See Illustration 17.1.

## Illustration 17.1 BR to split national network into local areas

British Rail is to embark on one of the most far-reaching changes in the organization of the rail network since nationalization in 1948, John Welsby, British Rail's chief executive, said yesterday.

From the end of April, the five regions, inherited from the days of private ownership, London Midland, Eastern, Western, Southern and Scottish, will be progressively abolished and replaced by about twenty smaller units, or profit centres.

The Railways Board will retain responsibility for strategic matters, such as investment programmes, financial targets and railway safety, but most aspects of the day-to-day running of the railway will be devolved to the profit centres.

British Rail's three passenger sectors, InterCity, Network SouthEast and Regional Railways, will be subdivided into several profit centres, run by a director, who will effectively own all the rolling stock, track and signalling equipment needed.

Malcolm Rifkind, the Transport Secretary, has pledged to introduce a bill to privatize British Rail after the next general election. Transport officials are still examining the options, which include privatization of BR as a single unit, the creation of a track authority and its break-up into regional companies.

Under the reorganization, Network SouthEast, which provides rail services in London and the South-East region, will be divided into nine semi-autonomous divisions. Some of these

divisions will be substantial businesses. South West, for example, which embraces all services from Waterloo, has an income of £252 million a year, employs about 8000 staff and covers 500 route-miles. Others, such as the London, Tilbury and Southend division, with an income of £65 million, employing about 1500 and covering 70 route-miles, will be considerably smaller.

InterCity will be divided into five route divisions. Regional Railways, which provides commuter, passenger and cross-country services, will also be split into five subdivisions.

In an effort to make each profit centre more cost conscious, charges will be levied on trains from one profit centre using the tracks of another. Directors will know exactly what they are responsible for and accountability for shortcomings will be instant. 'There will be no more alibis', Mr Welsby said.

The division of the national rail network into what is effectively twenty semi-autonomous railways is the final phase of the radical reorganization of the rail network introduced

in the early 1980s by Sir Robert Reid, the former British Rail chairman.

By reorganizing British Rail's passenger sectors around the markets rather than the regions they serve, Mr Welsby is determined to bring about a substantial improvement in the quality of services. 'I'm not changing the organization for the fun of it', he said. 'The changes are vital to improve the quality of service to passengers.'

The move is being watched closely by continental rail organizations, particularly those in France and Germany, which are already following the example set by British Rail with the introduction of the five sectors in the 1980s.

The reorganization is expected to take about a year to complete, and is likely to cost in the region of £50 million. Mr Welsby said that British Rail was not trying to facilitate or impede government plans to privatize the railways.

Source: *The Times*, 11 April 1991, p. 24.

Among the arguments favouring decentralized profit responsibility are:

- ➔ Divisional managers are only in a position to make satisfactory trade-offs between revenues and costs when they have responsibility for the profit outcome of their decisions (failing which it is necessary for many day-to-day decisions to be centrally regulated)
- ➔ Managers' performances can be evaluated more precisely if they have complete operating responsibility
- ➔ Managers' motivation will be higher if they have greater autonomy
- ➔ The contribution of each division to corporate profit can be seen via divisional profit reports.

The advantages of profit centres are that they resemble miniature businesses and are a good training ground for potential general managers.

When it comes to defining profit measures, several alternatives are available. An example built up from the data in Figure 17.9 will help to illustrate some of them.

|  |          |
|--|----------|
| Sales revenue generated by Division A                        | £100,000 |
| Direct costs of Division A:                                  |          |
| Variable operating costs                                     | £45,000  |
| Fixed operating costs under control of manager of Division A | £25,000  |
| Fixed costs not under the control of manager of Division A   | £10,000  |
| Indirect costs of Division A:                                |          |
| Apportioned central costs                                    | £15,000  |

**Figure 17.9** Division A's operating data for July

This data can be analysed in ways such as those suggested in Figure 17.10. One can identify strengths and weaknesses relating to each alternative measure of profit. The *contribution margin* is useful for short-run decision-making since it is not clouded by the inclusion of costs that do not respond to short-run volume changes. From a performance evaluation point of view, however, it is unsatisfactory in that it excludes all non-variable costs.

*Controllable profit* is a much better measure of the divisional manager's performance because it includes all the costs – whether fixed or variable – that are within his or her control. When non-controllable fixed costs are taken into account we have the *direct profit* of the division. This is more a measure of the division's performance than it is of the divisional manager's performance, so one needs to consider what it is that one is seeking to assess before one chooses a measure.

|                            | Division A<br>contribution margin<br>£ | Division A<br>controllable profit<br>£ | Division A<br>direct profit<br>£ | Division A<br>net profit<br>£ |
|----------------------------|--|--|----------------------------------|-------------------------------|
| Sales revenue              | 100,000                                | 100,000                                | 100,000                          | 100,000                       |
| Direct costs:              |  |  |                                  |                               |
| Variable                   | 45,000                                 | 45,000                                 | 45,000                           | 45,000                        |
| <b>Contribution margin</b> | <u>£55,000</u>                         |  |                                  |                               |
| Fixed controllable         |  | 25,000                                 | 25,000                           | 25,000                        |
| <b>Controllable profit</b> |  | <u>£30,000</u>                         |                                  |                               |
| Fixed non-controllable     |  |  | 10,000                           | 10,000                        |
| <b>Direct profit</b>       |  |  | <u>£20,000</u>                   |                               |
| Indirect costs             |  |  |                                  | 15,000                        |
| <b>Net profit</b>          |  |  |                                  | <u>£5,000</u>                 |

**Figure 17.10** Analysis of Division A's operating data

Finally, *net profit* (as pointed out in Chapter 3) helps us in assessing a division's performance in full cost terms, but this is not a relevant means of gauging the divisional manager's performance on account of the categories of cost that he or she is unable to influence either directly or indirectly. It could be argued that divisional managers benefit from seeing the full cost of their division's operations, but if the controllable elements are dwarfed by the uncontrollable (at the divisional level) it may not be highly motivational!

From the above we can reasonably conclude that controllable profit is the best of the specified measures for assessing a divisional manager's performance – at least in principle. In practice it may be found that the manager of a division acts in ways that improve his or her short-run profit position at the expense of both the division's long-run profit potential and the best interests of the organization as a whole. Examples might include:

- ➔ Eliminating training and management development activities
- ➔ Cutting back on advertising, routine maintenance or R&D.

Countering these ways of 'playing the system' must be devised by top management in the form of policy guidelines, etc. But any measure of profit is inevitably sub-optimal as an index of divisional performance for at least one of the following reasons:

- 1 It typically includes items (such as interest and taxation) that are not under the control of divisional managers
- 2 It only tells part of the story – something needs to be said about the investment that is needed to generate profit (the next subsection picks up this point).

### **An investment centre**

This is a segment, department or division of an enterprise under an accountable manager who is not only responsible for profit (i.e. for revenue and expenditure), but also has his or her success measured by the relationship of profit to the capital invested within the division (i.e. profitability). This is most commonly measured by means of the rate of return on investment (ROI).

The logic behind this concept is that assets are used to generate profits, and the decentralizing of profit responsibility usually requires the decentralization of control over many of an enterprise's assets. The ultimate test, therefore, is the relationship of profit to invested capital within a division. Much of its appeal lies in the apparent ease with which one can compare a division's ROI with earnings opportunities elsewhere – inside or outside the company. However, ROI is an imperfect measure and needs to be used with some scepticism and in conjunction with other performance measurements.

The value of the controllable/uncontrollable cost split is primarily found in fixing responsibility and measuring efficiency. Time is an important ingredient in this context, since all costs are controllable at some organizational level if a sufficiently long time span is taken. Controllable costs are those that can be directly regulated by a given individual within a given time period.

The division of costs into controllable and uncontrollable categories is important in order that performance levels may be evaluated and also for securing the cooperation of managers at all levels. Managers who are involved in planning their performance level in the knowledge that those controllable costs for which they are responsible will be monitored, accumulated and reported are likely to be motivated towards attaining their predetermined level of performance. In this way it can be seen that the collecting of controllable costs by responsibility centres serves as a motivating force as well as an appraisal mechanism.

While the ideal procedure is for each responsibility centre to be assigned those costs over which its manager has sole control and for which he or she is therefore responsible, in practical terms this cannot usually be achieved. It is rare for an individual to have complete control over *all* the factors that influence a given cost element.

Apart from those costs over which responsible individuals actually have control, their responsibility centre may be charged with costs that are beyond their direct control and influence, but about which management wishes them to be concerned. A good example is the cost of companies' personnel departments: operating managers may be charged with a proportion of the personnel department's costs on the grounds that either:

- ➔ They will be careful about making unnecessary requests for the services of the personnel department if they are made to feel somewhat responsible for its level of costs, or
- ➔ They may try to influence personnel managers to exercise firm control over their department's costs.

Allocating general overheads to responsibility centres is done by many companies that practise responsibility accounting (and that therefore recognize that such costs are beyond the control of those to whom they are allocated) on the grounds that each responsible individual will be able to see the magnitude of the indirect costs incurred to support this unit. There is a major disadvantage that should be seriously considered: managers of small responsibility centres incurring directly controllable costs at their level in a given time period of, say, £10 000 may be allocated £45 000 of general overhead costs. In relation to the overall level of overhead costs, managers may feel that those costs for which they are responsible are so insignificant that they may give up trying to control them. The point to note is that each cost must be made the responsibility of whoever can best influence its behaviour, and allocating costs beyond this achieves at best very little from a control viewpoint and may be distinctly harmful to the cost control effort. (Since a specific example of uncontrollable costs has not been given so far, the general overheads of £45 000 referred to above can be used as a suitable example. For control purposes the costs that are being considered are the costs that can be directly influenced at a given level for a specified time span.)

While heads of responsibility centres may not have sole responsibility for a particular cost item, this item may reasonably be considered to be controllable at their level if they

have a significant influence on the amount of cost incurred, and in this case their responsibility centre can properly be charged with the cost. This is one aspect of the wider problem that arises because few (if any) cost items are the sole responsibility of just one person. Guidelines that have been established for deciding which costs can appropriately be charged to a responsibility centre are, in summary:

- ➔ If individuals have authority over both the acquisition and the use of a cost incurring activity, then their responsibility centre should bear the cost of that activity
- ➔ If individuals do not have sole responsibility for a given cost item but are able to influence to a significant extent the amount of cost incurred through their own actions, then they may reasonably be charged with the cost
- ➔ Even if individuals cannot significantly influence the amount of cost through their own direct action, they may be charged with a portion of those elements of cost with which management wishes them to be concerned in order that they may help influence those who are more directly responsible.

That which applies to costs also, in essence, applies to revenues and assets.

## 17.6 Approaches to control

### Anthony's approach to control

The views of Robert Anthony of Harvard on management control have been very influential. They are stated in Anthony (1965, 1988).

When Anthony published his 1965 framework, the management control function was not generally recognized as a discrete activity. This has changed.

Management control is one of three types of planning and control activities that occur within organizations; the other categories are strategic planning (SP) and task control (TC). Anthony's definition of management control, given earlier (p. 728), presumes that goals and strategies exist, but that these do not arise automatically, hence:

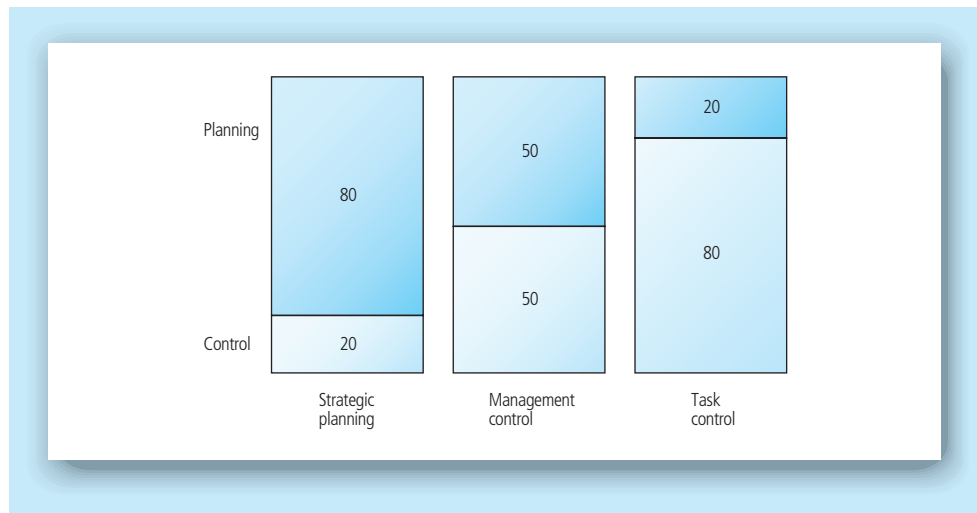
“Strategic planning is the process of deciding on the goals of the organization and the strategies for attaining these goals.”

(1988, p. 10)

Authors often distinguish between *planning* (i.e. deciding what to do) and *control* (i.e. ensuring that desired results are obtained). Anthony argues that both planning and control are undertaken at different organizational levels, hence it is more helpful to look at the mix (as shown in Figure 17.11):

“Strategies are the courses of action that an organization has adopted as a means of attaining its goals. They include the assignment of overall responsibility for implementation . . .





**Figure 17.11** The planning and control mix (adapted from Anthony, 1988)

Strategies are big plans, important plans. They state in a general way the *direction* in which the organization is supposed to be headed. They do not have a time dimension: that is, they exist until they are changed.”

(1988, p. 31)

“The purpose of the MC process is to carry out the strategies arrived at in the SP process and thereby to attain the organization’s goals.”

(1988, p. 34)

The 1988 approach links MC to the implementation of strategies in a direct way rather than to the attainment of objectives, which is an indirect purpose of MC.

The key difference between MC and strategic planning is that the latter is unsystematic: the need for strategic decisions can arise at any time – whether in response to a threat or an opportunity. Another difference is that SP is undertaken by top management and it involves a great deal of judgement. In contrast, MC is systematic, done at all levels, and involves considerable personal interaction but less judgement than SP. SP sets the boundaries within which MC takes place.

The third element in Anthony’s approach is task control:

“Task control is the process of ensuring that specific tasks are carried out effectively and efficiently.”

(1988, p. 12)

Anthony’s framework is shown in Figure 17.12. While dealing with SP and TC, Anthony’s 1988 book focuses primarily on MC, which can be described in terms of a process and the environment within which it takes place. The environment is partly external and partly internal, with the latter comprising:

- ➔ The organization’s structure
- ➔ A set of rules, procedures, etc.
- ➔ A culture.

The external environment contains influences that affect the level of uncertainty faced by the organization. At a highly uncertain extreme are:

- ➔ Newly developed products
- ➔ Differentiated products
- ➔ Aggressive competition
- ➔ Uncertain sources of inputs
- ➔ Uncertain political circumstances.

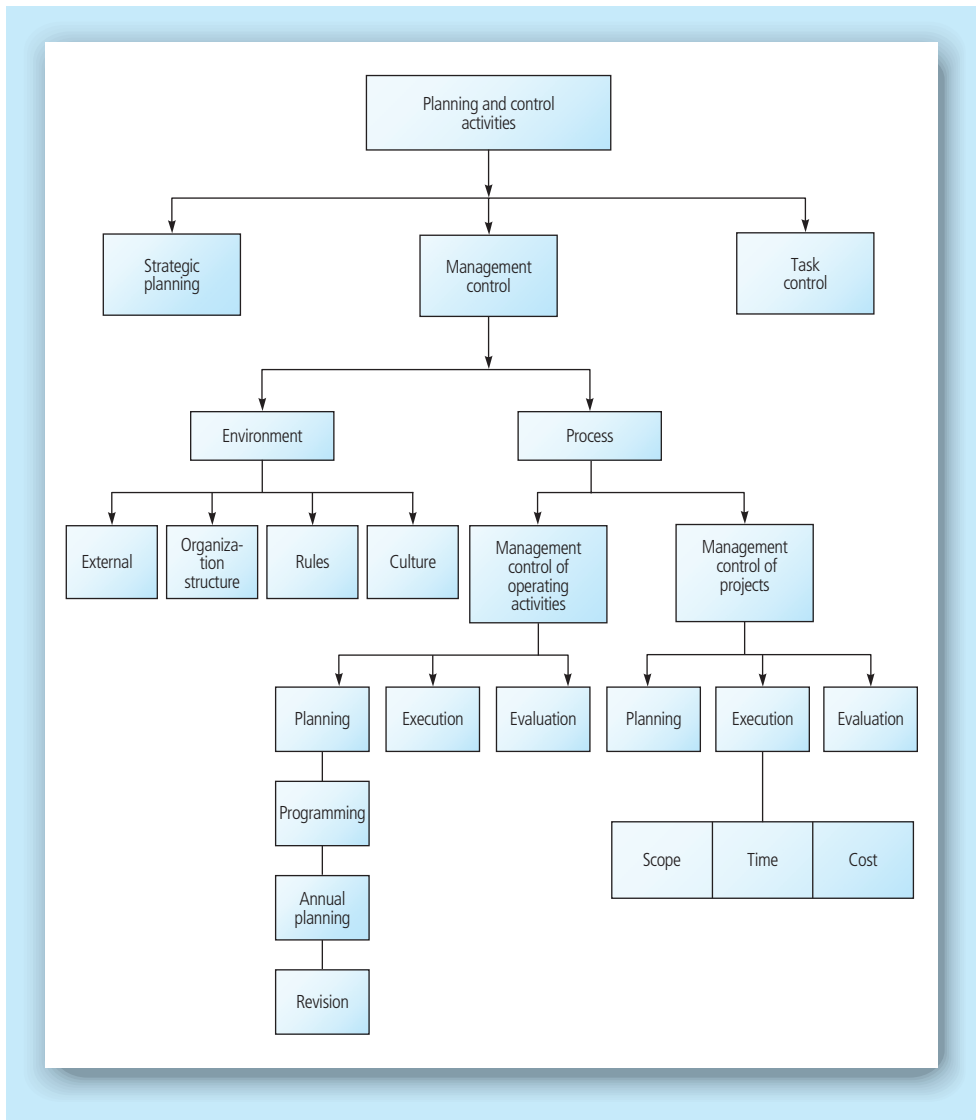


Figure 17.12 Anthony’s framework (source: Anthony, 1988, p. 19)

At a less uncertain extreme are:

- ➔ Mature products
- ➔ Commodity products
- ➔ Price competition
- ➔ Secure sourcing of inputs
- ➔ Political stability.

Within a highly uncertain setting an organization is likely to pay great attention to programming; to make broad budget estimates; to revise budgets frequently; to set limits to discretionary costs; to permit a good deal of management latitude; to insist on a rapid flow of information; to evaluate performance subjectively in terms of results rather than process; and to have a high proportion of bonus within the reward package.

The opposite characteristics are likely to apply in a relatively certain environment.

### Merchant's approach to control

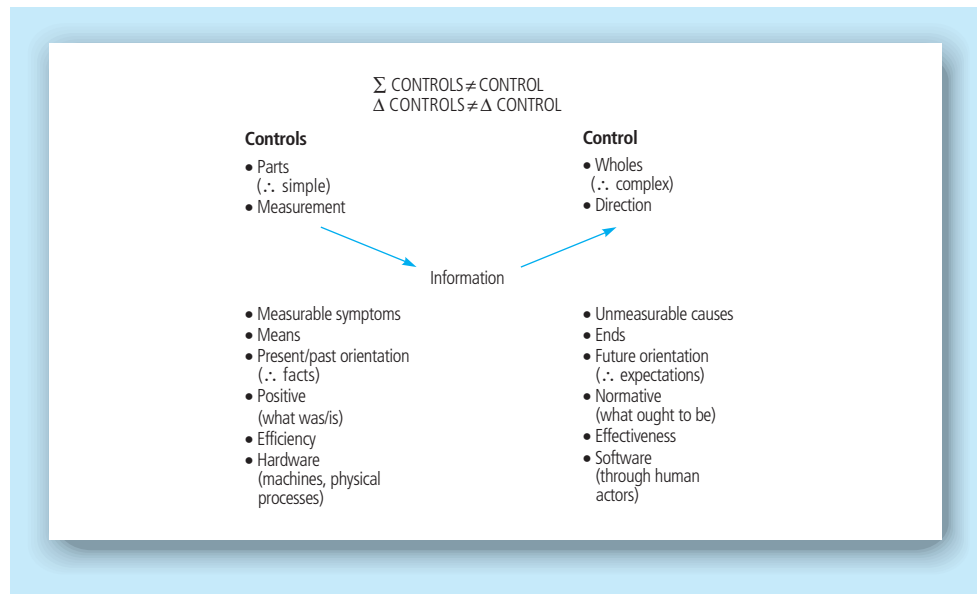
An organization's control system is comprised of a variety of mechanisms, including:

- ➔ Personal supervision
- ➔ Job descriptions
- ➔ Rules
- ➔ Standard operating procedures
- ➔ Performance appraisal
- ➔ Budgets
- ➔ Standard costing
- ➔ Incentive compensation schemes.

However, it would be wrong to think of 'controls' – such as the above – as being the plural of 'control', and it would also be wrong to assume that more 'controls' would automatically give us more 'control', since this would assume that they meant the same thing, which they do not.

'Controls' has the same meaning as measurement, or information, whereas 'control' is more akin to direction. 'Controls' is concerned with means while 'control' is concerned with ends, and they deal respectively with facts (i.e. events of the past) and expectations (i.e. desires about the future). From this it will be appreciated that 'controls' tend to be analytical and operational (concerning what was and is) and 'control' tends to be normative (concerning what ought to be). A summary of key differences is shown in Figure 17.13.

The increasing ability to develop 'controls' has not necessarily increased our ability to 'control' organizations. If controls are to lead to control, they must encourage human actors to behave in a way that facilitates adaptive behaviour on the part of the organization as a whole.



**Figure 17.13** The different focus of control and controls (source: Wilson, 1983, p. 57)

The complexity and uncertainty of the control problem are apparent when, for example, controls reveal that ‘profits are falling’. But this does not indicate how one might (or should) respond – indeed, it would not be possible even to identify the whole array of potential responses. What is needed, therefore, if control is to be effective is a basis for forming expectations about the future as well as understanding about the past that will enable us to combine these, in order that we might behave in an adaptive way by either anticipating external changes and preparing to meet them, or by creating changes.

From this arises the basic question: how do we control? In large part this is resolved by the answer to another question: what do we measure in order to control? Care must be taken in measuring the key elements in any situation rather than those elements that lend themselves to easy measurement. (‘Controls’ are only helpful in ‘control’ if they are designed in the context of the overall control problem.)

Merchant (1985, 1998) offers some valuable advice on a range of controls, but with a control perspective. He classifies these controls under the headings given below.

### Results controls

Reward systems – in which an individual’s pay, promotion prospects, etc., depend on his or her performance – are a good example of results control. It is not unusual for desired results to be expressed in quantitative terms – whether financial (e.g. ROI, EPS) or not (e.g. growth rate, market share) – which gives a benchmark for exercising results control. At senior management levels this form of control predominates, since it is compatible with decentralized organizational structures. At middle-management levels, where financial goals may be less dominant, results control can be exercised through MbO (management by objectives) systems.

The effectiveness of results controls derives from the ability of this approach to address some key control problems. In particular, motivational problems are eased since individuals are influenced to produce the results that will enhance both the organization's performance and their own rewards. By focusing on future expectations the results approach to control can be useful in informing managers as to what is expected of them. This emphasizes a feedforward orientation.

Three conditions need to be fulfilled before results control can be employed:

- 1 It is known what results are desirable
- 2 The desired results can be controlled to some extent by those whose actions are being influenced
- 3 The controllable results can be measured.

### Action controls

Action controls are used:

“... to ensure that individuals perform (or do not perform) certain actions that are known to be beneficial (or harmful) to the organization.”

(Merchant, 1985, p. 29)

Categories of action controls are:

- ➔ Behavioural constraints (whether physical or administrative)
- ➔ Pre-action reviews
- ➔ Action accountability
- ➔ Redundancy (in which more resources are allocated to a task than is strictly necessary, which increases the likelihood of its accomplishment).

Two conditions need to be fulfilled if action controls are to be effective:

- 1 Knowledge must exist as to which actions are desirable (or undesirable)
- 2 The ability must be present to ensure that the desirable actions occur (or that the undesirable ones do not).

### Personnel controls

There are two categories of personnel control that can be usefully harnessed as part of the management control endeavour:

- 1 Individual self-control, which, as a naturally present force, motivates most people to want to do a good job
- 2 Social control, which is exerted by other members of a group on those individuals who deviate from group norms and values.

If these two categories are insufficient, they can be augmented by:

- ➔ Selection and placement
- ➔ Training
- ➔ Cultural control.

There are several advantages that personnel controls have over results controls and action controls:

- ➔ Feasibility is not a serious constraint
- ➔ There are fewer harmful side-effects
- ➔ Their cost is typically lower.

### **Financial controls**

Financial controls are a form of results control that constitute the single most important type of control used in organizations of any size. The reasons favouring financial controls are fairly obvious:

- ➔ Financial objectives are very important in commercial life
- ➔ Financial performance indicators are easy to derive
- ➔ Since financial results can be achieved via various routes, the use of financial controls allows for some managerial discretion
- ➔ Using financial measures is relatively inexpensive, since accounting systems exist within all enterprises.

Inevitably there are negative effects that can outweigh the advantages of using financial controls. The most serious are:

- ➔ Behavioural displacement – especially when the control system encourages managers to be overly concerned with short-term profits rather than longer-term strategic ends, or when it causes excessive risk aversion
- ➔ Gamesmanship.

It has been argued that there is a tendency for financial measures to drive out non-financial measures (see, for example, Munro and Cooper, 1989) within MCS design, which, given the partiality of financial measures (i.e. they measure those things that can be measured in financial terms), is unfortunate.

### **The approach of Johnson and Scholes**

Strategic marketing involves strategic change. Johnson and Scholes (1993) have argued that there are two ways in which an organization can cope with strategic change:

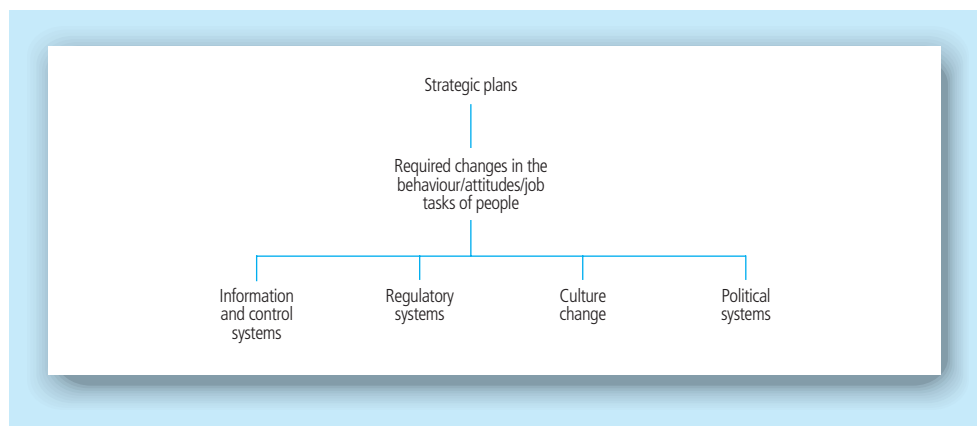
- 1 Make use of control and regulatory systems to ensure that the tasks of implementation are clear, that their execution is monitored, that individuals and groups have the capabilities to implement change, and that they are rewarded for so doing
- 2 Ensure that those charged with implementing change understand and work within the social, political and cultural systems that regulate organizational behaviour, and which can give rise to a resistance to strategic change.

Their approach to dealing with these issues is reflected in Figure 17.14. If we take the information and control systems first, it is widely recognized that quantitative measures are needed to see if desired results are being achieved. Such measures will typically include:

- ➔ Financial analysis
- ➔ Market analysis
- ➔ Sales and distribution analysis
- ➔ Physical resource analysis
- ➔ Human resource analysis.

A set of guidelines for ensuring the effective design and operation of control systems would deal with such aspects as:

- ➔ Distinguishing between various levels of control (as proposed by Anthony, 1965, 1988), since different levels will require different information
- ➔ Creating responsibility centres as a means of delegation and motivation, ensuring information is provided in a suitable form for each responsible manager
- ➔ Identifying the critical success factors and supplying information relating to these in a way that highlights their interrelationships



**Figure 17.14** The influence of organization systems on strategy implementation (adapted from Johnson and Scholes, 1988, p. 292)

- ➔ Avoiding misleading measurements by accepting that quantitative indicators of performance are not available for every activity and it is not helpful to use a measurable index as a surrogate for an unmeasurable characteristic
- ➔ Being wary of negative monitoring in which only poor performance is reported, since this can lead to risk-averse behaviour or a tendency to 'pass the buck'.

The next means for ensuring the implementation of strategic change is via regulatory systems. These might range from training to the management style of an organization:

- ➔ Training and development to ensure staff are capable of implementing change, which involves both new skills and attitudes
- ➔ Incentive and reward systems to encourage compliance with required change, whether in the form of pay increases or non-monetary rewards (such as promotion)
- ➔ Organizational routines by which tasks are carried out may exhibit inertia, so deliberate steps need to be taken to redesign them in order to facilitate change
- ➔ Management style, which embodies the organization's culture, its circumstances and the characteristics of its managers, needs to be appropriate to the task of strategic implementation.

Moving on from regulatory systems brings us to culture change. At its most basic, this focuses on the need for change to be recognized within the organization in a way that ensures those responsible for bringing change about believe in what they are doing. This can be achieved in two stages, both of which are concerned with cognitive change:

- 1 The beliefs and assumptions underlying the way in which the organization's members make sense of their organizational world need breaking down
- 2 A reformulated set of beliefs needs to be put in their place to reorientate the culture from the past to the future. For cultural change to be meaningful, it must impact upon the day-to-day experiences of individuals within the organization.

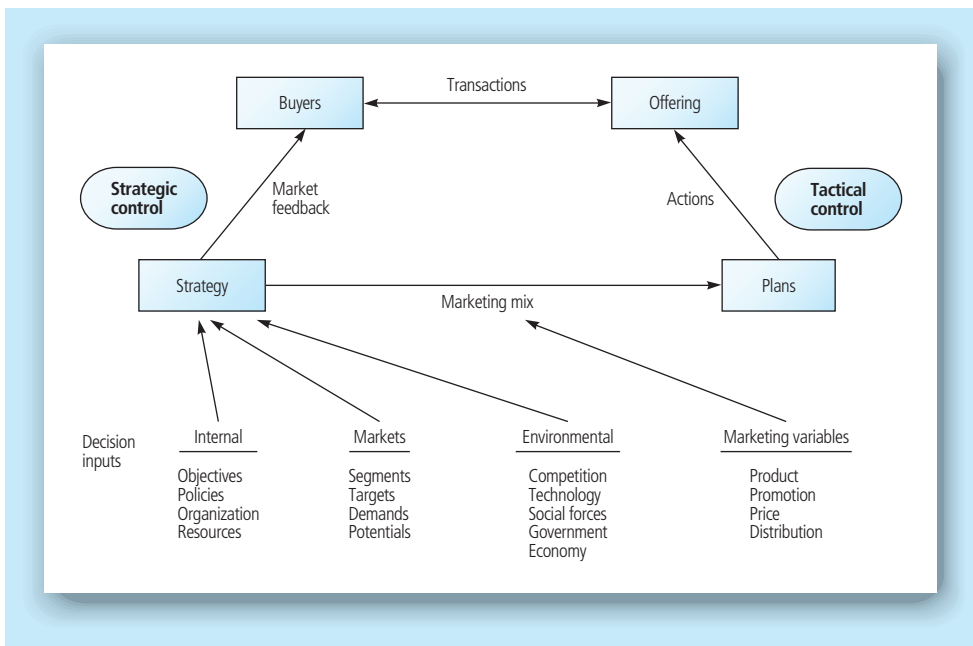
Finally, there is the political system to consider. The overlaps among control systems, regulatory systems, culture and political systems is largely self-apparent, but it is important to emphasize that planning and control are inherently political rather than neutral. This will be illustrated later when we discuss the notion of entrapment.

### The approach of Luck and Ferrell

Once the plan/strategy has been determined and steps taken (e.g. via a suitable organization) to put this into effect, the control process exists to ensure that the plan will be achieved (in so far as this is feasible).

Control can operate at different levels. For example, Figure 17.15 shows *tactical* control, which focuses on the implementation of plans on the right, and *strategic* control,



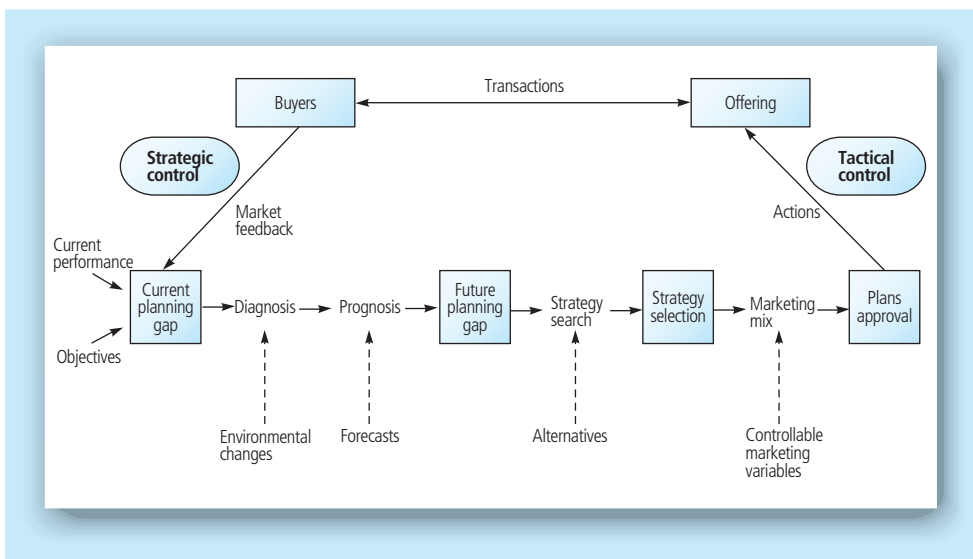


**Figure 17.15** A basic control model for marketing (adapted from Luck and Ferrell, 1979, p. 15)

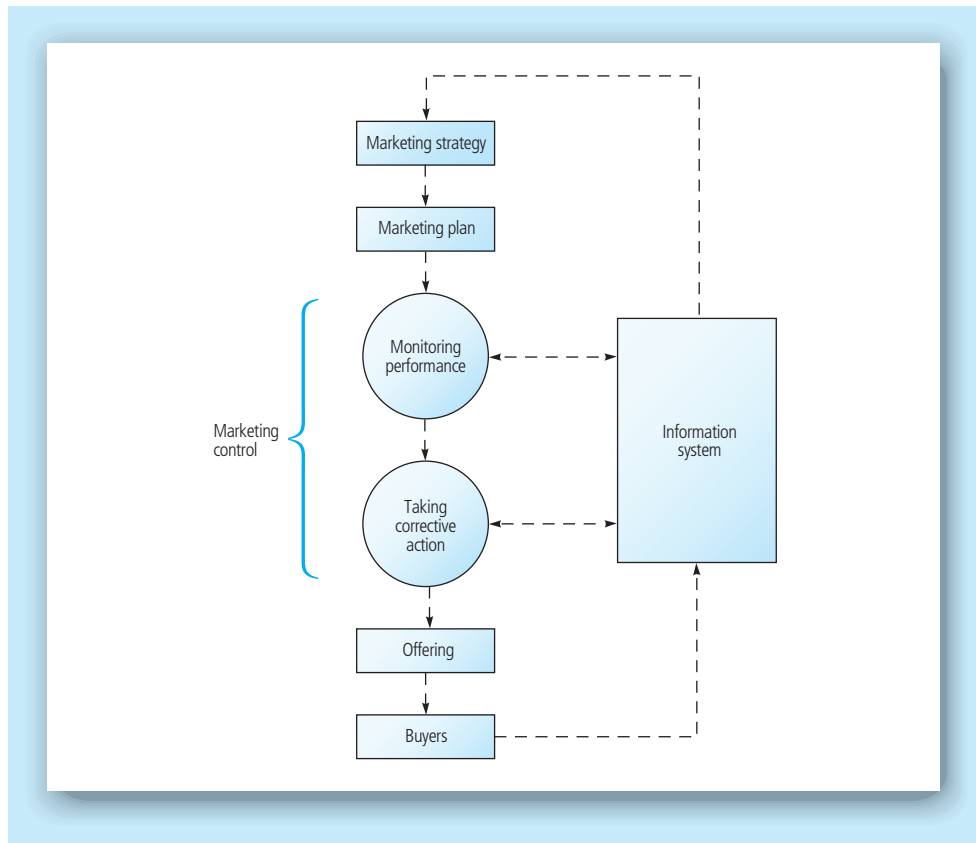
which focuses on the possible revision of strategy on the left. This is developed further in Figure 17.16.

Tactical control typically relates to adjustments in the execution of an established marketing plan – such as fine-tuning on pricing or advertising schedules.

Strategic control deals with the reformulation of the plans themselves. For example, actual buyer behaviour patterns may indicate that a plan has been based on false premises.



**Figure 17.16** Strategic and tactical marketing control (adapted from Luck and Ferrell, 1979, p. 416)



**Figure 17.17** The role of information in marketing control (source: Luck and Ferrell, 1979, p. 418)

Strategic rethinking will thus be necessary in developing a new marketing plan (as shown in the lower half of Figure 17.16).

The role of the information system needed to facilitate tactical and strategic control is indicated in Figure 17.17.

## 17.7 Some behavioural factors

Management control (MC) is based on interactions between an organization's members, hence the control process must reflect how individuals behave, as well as their knowledge, skills and personality traits.

In participating in organizations, individuals are seeking to satisfy various needs, some of which are extrinsic (i.e. satisfied by the actions of others) while others are intrinsic (i.e. satisfied by the feelings individuals have about themselves and their achievements).

The extent to which a given individual might be motivated to engage in organizational activities has been argued to be a function of:

- 1 Beliefs regarding the outcomes that are likely to result from this individual's actions
- 2 How attractive these outcomes are in relation to satisfying the individual's needs.

In designing and operating control systems, therefore, it is necessary to consider:

- ➔ The actions that individuals are motivated to take in their perceived self-interest
- ➔ The best interests of the organization.

“MC is a blend of rational and behavioral considerations, and neglecting either type leads to erroneous generalizations.”

(Anthony, 1988, p. 22)

It can also lead to harmful side-effects. Some side-effects stemming from the design and implementation of control systems are inevitable and an inherent characteristic of certain types of control. On the other hand, some harmful side-effects are avoidable – such as those stemming from poor design, the implementation of the wrong type of control system for a given situation, or both.

The major side-effects of a negative nature are as follows.

### 1 Behavioural displacement

This arises when the behaviours encouraged by the control system are inconsistent with the strategy the organization seeks to pursue. In the case of results controls, displacement can occur when there is a poor understanding of desired results or an excessive reliance on easily quantified results. In the case of action controls there is the risk of displacement due to means – ends inversion when individuals are (wrongly) encouraged by the control system to pay more attention to what they are doing (the means) rather than to what they should be accomplishing (the ends). Displacement in the context of action controls can also arise when rules and standard operating procedures are followed in a rigid, non-adaptive manner.

There is also the risk of behavioural displacement when social controls (such as group norms) induce a degree of routinized conformity that stifles any form of creative adaptation.

### 2 Gamesmanship

This refers to the tendency among managers to ‘play the system’ by means of actions intended to improve their measures of performance without producing any positive economic effects. It is particularly prevalent when either results or action controls are in use. In both, it is possible for data to be manipulated, thus rendering the control system ineffective.

### 3 Negative attitudes

Such negative effects as job tension, frustration, conflict and resistance can arise even when control systems are well designed. This is most likely to be the case with poor

performers, since their limitations become more apparent the better the control system. However, negative attitudes can also arise in the case of potentially good performers if the control system is poorly designed.

Potential consequences of negative attitudes include gamesmanship, sabotage or turnover, all of which can impede the achievement of strategic ends.

#### 4 Short-termism

“... if long-term growth of profits is the aim then rewards based on short-term achievement of sales targets are not likely to be helpful.”

(Johnson and Scholes, 1988, p. 298)

An organization's reward system is supposed to encourage goal congruence. However, control systems tend to focus on short-term results even though managers are expected to achieve both short- and long-run objectives. The reason for this is simple: the control system tends to report what has happened (e.g. over the past month) and is less capable of specifying what might happen in the long-term future.

“Our lack of knowledge about how best to measure a manager's performance is probably the most serious weakness in MCS.”

(Anthony, 1988, p. 74)

For example, performance in a given period may not reflect the manager's real performance. Reasons for this may be that:

- ➔ Outcomes (hence performance) in that period will be influenced by the actions taken in earlier periods, as well as by actions of managers in other responsibility centres
- ➔ Current actions will have a lagged impact on future outcomes and it is virtually impossible to eliminate these effects from the measurement of current performance.

Dent (1990, p. 3) has commented on the way in which accounting practices have been drawn into the argument over short-termism:

“The extensive use of short-run financial calculations to appraise managerial performance is deemed to have diverted managerial attention away from fundamental value-creating activities, motivating instead opportunistic behaviours with less permanent benefits...”

#### 5 Entrapment and escalation

Anthony's framework (see Figure 17.12) distinguishes between MC of operating activities and MC of projects. Our focus so far has been on the former, but there are some aspects of the latter that warrant our attention.

A project can be defined as a set of activities intended to accomplish a specified end result of sufficient importance to be of interest to management.

“In a project, the focus of control is on the project itself, rather than on activities in a given time period in individual responsibility centres, as is the case with the management control of ongoing operations.”

(Anthony, 1988, p. 16)

There are three aspects of particular interest within a project:

- 1 Its scope (i.e. the specifications for the end-product)
- 2 Its schedule (i.e. the time required)
- 3 Its cost.

Trade-offs among scope, schedule and cost are usually possible in projects. For example, costs might be reduced by decreasing the project's scope, or the schedule might be reduced by increasing the cost. This is not always easy to plan, since performance standards are likely to be less reliable for a one-off project than for ongoing activities. Moreover, projects tend to be influenced to a greater extent by the external environment than is the case with continuing operations.

The prospect of being assessed as part of the control endeavour – whether in relation to projects or ongoing activities – typically affects the behaviour of individuals, often with dysfunctional consequences. Control activities are far from neutral in their impact, as can be shown by means of a phenomenon of recent interest: entrapment. This occurs when a responsible individual increases his or her commitment to an ineffective course of action in order to justify the previous allocation of resources to that task. Entrapment is seen as being one example of a broader psychological process that focuses on commitment. The commitment of an individual to a particular course of action is likely to depend on, *inter alia* (see Brockner et al., 1986, p. 110):

- ➔ Responsibility for the action
- ➔ Responsibility for the consequences of the action
- ➔ The salience of the action
- ➔ The consequences of the action.

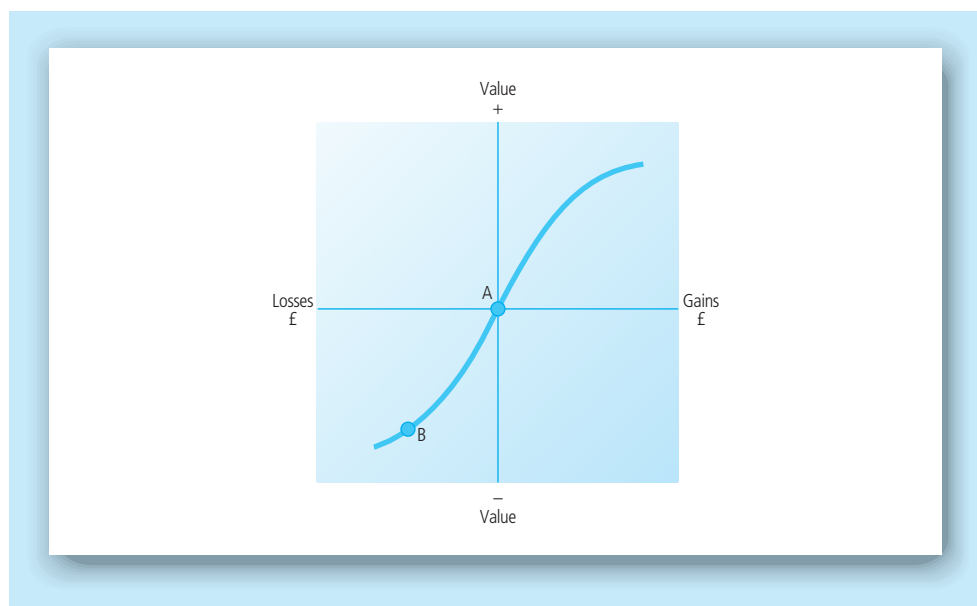
While entrapment is not easily explained in terms of economic rationality, there are various plausible explanations reflecting psychological rationality. For example (after Wilson and Zhang, 1997):

- ➔ There is a need for decision-makers to assert themselves and reaffirm the wisdom of their initial decision
- ➔ The initial commitment was made as a result of the decision-maker's belief in the goodness of the course of action, hence self-justification, justification to others, and the norms of consistency are served by continuing; continuing avoids the waste of the investment already made (which is known as the sunk-cost fallacy)

- ➔ Further investment gives further opportunities for the project to come good; negative feedback is treated as a learning experience (i.e. a cue to revise the inputs rather than cancel the project)
- ➔ Negative feedback, alternatively, may be seen as a chance variation
- ➔ A state of inertia has been created by which a project's financial past cannot be divorced from its future – prior investment then motivates the decision to continue
- ➔ Decisions are not made in a social vacuum, hence social costs and benefits must be considered relating to self-image, organizational image, reputation and face saving – continue so long as the social and psychological benefits are greater than the economic costs
- ➔ Information processing has behavioural underpinnings, such as selective perception, in which we see what we want to see
- ➔ An organization's reward system may work to encourage the decision-maker to overlook short-term setbacks and continue with the original project through bad times.

Prospect theory (Kahneman and Tversky, 1984) has been used to explain the phenomenon of entrapment (see Figure 17.18). A value function (i.e. the curve in Figure 17.18) shows the relationship between objectively defined gains and losses, and the subjective value placed on these by the decision-maker.

At the outset the decision-maker is at point A, but if the decision is unsuccessful he or she will be at point B, where further losses do not result in large decreases in value. On the other hand, any gains will result in large increases in value; thus, at point B, the decision-maker will risk further losses in the hope of making gains. Despite the sunk costs, risky behaviour is much more likely at point B than it was at point A.



**Figure 17.18** The value function

A variation on the theme of entrapment is that of escalation (e.g. see Staw and Ross, 1987a, b). These two phenomena are often related but are analytically separable: entrapment may exist in the absence of escalation. Vivid examples of escalation have been experienced in many major projects when the cost out-turns prove to be much greater than anticipated: the Sydney Opera House, Chicago's sewage system, Concorde, the Channel Tunnel.

## 17.8 Summary

Many commentators (e.g. Lamb and Shrivastava, 1986) have observed that the study of strategy implementation and control has received far less attention than its importance warrants. No matter how brilliant the formulation of strategy, it is quite useless if it cannot be effectively implemented and the subsequent performance of the organization controlled.

An array of approaches to control that focus in part on social/behavioural issues and in part on analytical techniques has been considered. Feedforward and feedback control, formal and informal controls and the approaches of authorities such as Anthony, Merchant and others were discussed. Some relevant techniques, including ratio analysis, marketing audits and networking, have been dealt with in earlier chapters. The importance of social and behavioural issues is that analytical control techniques function only in an organizational context: social and analytical controls are complements rather than substitutes.

It can be argued (e.g. Maciariello, 1984, p. 54) that the hierarchical structure of an organization is a response to the limited information-processing ability of decision-makers. At each level within the hierarchy it is desirable, from the viewpoint of coordination and control, to identify the responsibilities that need to be undertaken if successful outcomes are to be achieved. One approach to this task is to define the *key success factors* over which each organizational unit has control and to assign responsibilities in accordance with these factors. The basic idea behind this approach is a simple one: if a manager's cognitive limitations constrain the amount of information that can be processed at any time, it makes sense to be deliberately selective by focusing on the information that is most important in terms of fulfilling the manager's designated responsibilities.

Selecting key success factors that adequately reflect these responsibilities gives a basis for:

- ➔ Establishing appropriate performance measures
- ➔ Determining resource allocation procedures
- ➔ Specifying reward systems.

The identification of key success factors gives focus to the control process. In essence, the following question is being posed: to which factors are desired outcomes most sensitive? The greater the degree of sensitivity (or responsiveness) between a factor and an outcome, the more critical is that factor in controlling the organizational unit in order to bring about the desired outcome.

It is inevitable that some critical factors (such as macro-economic variables, government actions, competitive behaviour and suppliers' behaviour) cannot easily be influenced by a given organization, while other critical factors (which might include product design, quality, price and level of customer service) are more readily influenced by the organization's managers. However, in control terms the point to note is that the outcome that is desired (e.g. sustained competitive advantage) can be achieved if the manager understands how the key variables behave (i.e. how they change over time and why those changes occur), since this gives the manager the ability to make future predictions. Through the ability to make accurate predictions of each key variable's future value, the manager is in a position to control the outcome of events. In part this will require the manipulation of those variables that can be directly influenced, and in part it will require an awareness of the anticipated future values of variables that the manager is unable directly to influence. Control is achieved when desired outcomes are realized; hence it is possible to be in control even though one is unable to manipulate the values of all variables. It is worth repeating the major elements underlying the above discussion:

- ➔ An understanding of the behaviour of key variables gives a basis for making predictions about their likely future values
- ➔ On the basis of good predictions it is possible to bring about desired outcomes by manipulating the variables over which one has influence in the knowledge of the expected behaviour of those variables over which one has no direct influence.

In seeking to control marketing activities, the requirements of effective control systems are:

- ➔ They must provide timely information
- ➔ They must measure the essential nature of the activity being assessed
- ➔ They should provide information on trends
- ➔ They must facilitate action
- ➔ They must be economical
- ➔ They must be meaningful.

Two developing fields which are likely to increase in importance are those of expert systems (see McDonald and Wilson, 1990) and strategic control (see Wilson, 1997).