

Chapter

18

Management control – 2



18.1 Learning objectives

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

- (a) understand the nature of controls;
- (b) design and operate marketing budgeting systems;
- (c) carry out variance analyses in a marketing context;
- (d) recognize how to use competitive and environmental intelligence in devising corrective responses.

18.2 Introduction

Having considered in Chapter 17 the nature of control and control systems, along with a range of approaches to control, this chapter looks in more detail at the operation of some of the more widely used control systems (such as marketing audits, budgeting and variance analysis). It then goes on to consider how corrective action might be taken if outcomes are not in accordance with plans.

18.3 Controls

Forms of control

In large organizations there are a number of insidious and unobtrusive controls to be found. These are all the more dangerous and powerful because they are so deceptive. Their deceptiveness is shown in their *not* causing participants to feel their presence – there is no feeling of being oppressed by a despot. Instead, there is perhaps just the experience of conforming to the logic of a situation, or of performing in accordance with some internalized standard.

Beyond this source of ‘control’ there are other sources. To the extent that the behaviour of members of organizations is controlled (i.e. appears to be regular and predictable), such regularity may derive from the norms and definitions of subcultural groups within the organization rather than from official rules and prescriptions. The idea that organizational rules constitute the blueprint for all behaviour within organizations is not a tenable one.

Nevertheless, the most significant form of power within organizations is the power to limit, guide and restrict the decision-making of organizational personnel, such that even when they are allowed (or obliged) to use their own judgement they do not deviate from official expectations. In part this is due to the organization’s structure, which can be seen as a series of limitations and controls over members’ decision-making, and which results from powerful, senior organizational personnel choosing what the structure should be (and hence determining who is allowed to do what).

It is something of a paradox that the modern individual is free from coercion through the power of command of superiors than most people have ever been, yet individuals in positions of power today probably exercise more control than any tyrant ever did. This is largely due to contemporary forms of power exercised within organizations and by organizations in society. There is a distinct trend that places less reliance on control through a fixed chain of command while placing more reliance on indirect forms of control. Let us pursue this in greater detail.

Forms of control have changed with the passage of time, and these forms have had impacts not only within organizations, but also through them, on contemporary society.

Organizations have taken advantage of a variety of control mechanisms from time to time, ranging from ones that are obviously bureaucratic in nature (e.g. command authority and discipline) to ones that are quite unbureaucratic (such as the controlling power that is rooted in expert knowledge).

We can consider the following range of control mechanisms:

- ➔ The prototype (bureaucratic control) is the authority exercised through a *chain of command* in which superiors give subordinates instructions that must be obeyed. This coercive form of control has strong military overtones, and an essential element is rigorous discipline that must be enforced through coercive sanctions. Such discipline is not usually a characteristic of contemporary industrial life.
- ➔ The establishing of explicit regulations and procedures to govern decisions and operations gives a programmed form of control. Discipline is involved in this mechanism also, and close links can be seen between the idea of a set of rules that must be followed and the idea of following orders via a chain of command. However, explicit rules do restrict the arbitrary exercise of power by superiors because they apply to rulers as well as to the ruled.

In specifying rules on how to behave in particular circumstances, it is unlikely that all possible situations will be catered for. It follows that rules should ideally be related to the principles underlying decisions rather than to particular decisions – thus, specifying *criteria* for decision-making will be less restrictive than the stipulating of *how* specific decisions should be made.

- ➔ Incentive systems constitute a further control mechanism. Salaries and career advancement clearly make individuals dependent to a large extent on the organization that employs them, thereby constraining them to submit to the authority exercised within that organization.

Incentives are often tied directly to performance, with piece-work rates and sales commissions being the most obvious examples. However, performance measures can be developed for most organizational roles, and adjustments in salary levels and promotion decisions will depend at least to some extent on measured achievements.

- ➔ Technology provides a control mechanism in two forms:
 - ➔ Production technology constrains employees' performance, thereby enabling managers to control operations (e.g. the speed of an assembly line can be used to regulate productivity).

- ➔ The technical knowledge possessed by an organization's 'technocrats' gives them the ability to understand and perform complex tasks and thereby maintain control of a situation. Management is thus able to control operations, albeit indirectly, by hiring staff with appropriate professional/technical skills to carry out the required responsibilities.

This reduces the need to use alternative mechanisms, such as detailed rules or close supervision through a chain of command.

- ➔ Expert knowledge is a vital requirement in managing organizations. (It could even be argued that successful management comes about through the exercising of control over the basic knowledge.) It follows that recruiting suitable technocrats is a key mechanism for controlling the organization. If technically qualified individuals are selectively recruited and if they have the professional ability to perform assigned tasks on their own, then if the organization gives such individuals the appropriate discretion to do what needs to be done within the broad framework of basic policies and administrative guidelines, it should be possible for control to be effective.
- ➔ The allocation of resources (including personnel) is the ultimate mechanism of organizational control, since this facilitates certain actions and inhibits others.

Within most organizations one will find several of these mechanisms of control in operation, yet there seems to be a trend towards a decreasing reliance on control through a chain of command and an increasing reliance on indirect forms of control, e.g. via recruitment policies. Incentive systems and machine technologies are perhaps the most prevalent mechanisms of contemporary organizational control: control via recruitment and resource allocation is indicative of the likely future pattern.

Controls may be informal as well as formal. The former are unwritten mechanisms that can influence either individual or group behaviour patterns within organizations in profound ways. A distinction can be made among different types of informal control by means of the level of aggregation (i.e. from individual through small groups to large groups) chosen (see, for example, Jaworski, 1988). Three categories are:

- 1 Self-control, in which individuals establish their own personal objectives and attempt to achieve those objectives by monitoring their own performance and adapting their behaviour whenever this is necessary. This can lead to high levels of job satisfaction, but it may fail to achieve the outcomes sought by top management (i.e. those relating to the organization rather than specific individuals). In order to motivate individuals to act in accordance with top management's wishes, a system of incentives will be needed.
- 2 Social control is applied within small group settings by members of the group. It is typically found that groups (e.g. marketing teams) set their own informal standards of behaviour and performance with which group members are expected to conform. These standards represent values and mutual commitments towards some common goal. Whenever a member of the group behaves in a deviant way by

violating a group norm, the other members of the group will attempt to use subtle pressures – such as humour or hints – to correct the deviance. If this fails and violations are repeated, the group's reaction is likely to be to ostracize the deviant individual. In a marketing context there may be group norms for, say, expenses and sales volumes within a sales team.

- 3** Cultural control applies at a corporate (or divisional) level, and stems from the accumulation of rituals, legends and norms of social interaction within the organization. Once an individual has internalized the cultural norms, he or she can be expected to behave in accordance with those norms. This gives reason to see cultural control as being the dominant control mechanism for senior management positions involving non-routine decision-making – the judgemental factor will reflect the manager's cultural conditioning.

In contrast to informal controls there are formal controls – written management-initiated mechanisms that influence the probability that individuals, or groups, will act in a manner that is supportive of marketing objectives. Three categories of formal controls can be identified, with timing being the distinguishing factor (i.e. these controls echo the sequence of managerial processes):

- 1** Input controls consist of measurable actions that are taken prior to the implementation of plans, such as specifying selection criteria for recruiting staff, establishing recruitment and training programmes, and various forms of resource allocation. The mix of these inputs can be manipulated in an attempt to secure control.
- 2** Process control relates to management's attempts to influence the means of achieving desired ends, with the emphasis being on behaviour and/or activities rather than on the end results – such as requiring individuals to follow established procedures. There is no clear agreement in the literature as to whether the organization's structure represents a control mechanism or not. Since it can be seen to influence and shape individual and group behaviour, it is not unreasonable to think of structure as being part of process control.
- 3** Output controls apply when results are compared with performance standards, as in feedback control.

In considering control in marketing one might emphasize the control of marketing activities in a relatively detached and impersonal way, as is done by strategy formulation (feed-forward control) and variance analysis (feedback control). Alternatively, one might emphasize the control of marketing personnel, which involves finding ways to influence the behaviour of those engaging in marketing activities in order that desired ends might be achieved. Since it seems likely that marketing activities can only be controlled through marketing personnel, the best way forward would seem to be a balanced combination of both approaches: in other words, feedforward and feedback need to be combined with marketing activities by those who devise and execute marketing activities.

The ultimate test of any control system is the extent to which it brings about organizational effectiveness, and it is fair to say that there is little rigorously formulated

evidence to demonstrate clear linkages between any approach to control and organizational effectiveness.

Audits

One approach towards assessing marketing effectiveness is the marketing audit (dealt with in detail in Chapter 2).

The marketing audit exists to help correct difficulties and to improve conditions that may already be good. While these aims may be achieved by a piecemeal examination of individual activities, it is better achieved by a total programme of evaluation studies. The former approach is termed a 'vertical audit', as it is only concerned with one element of the marketing mix at any one time. In contrast, the latter approach, the 'horizontal audit', is concerned with optimizing the use of resources, thereby maximizing the total effectiveness of marketing efforts and outlays. As such, it is by far the more difficult of the two, and hence rarely attempted.

No matter which form of marketing audit is selected, top management (via its audit staff) should ensure that no area of marketing activity goes unevaluated and that every aspect is evaluated in accordance with standards that are compatible with the total success of the marketing organization and of the firm as a whole. This, of course, requires that all activities be related to the established hierarchy of objectives.

The distribution audit

In the planning and control of costs and effectiveness in distribution activities the management audit can be of considerable value. Not surprisingly, however, it entails a complex set of procedures right across the function if it is to be carried out thoroughly. The major components are the channel audit, the PDM audit, the competitive audit and the customer service audit. Each of these will be considered briefly in turn.

1 The channel audit

Channels are made up of the intermediaries (such as wholesalers, factors, retailers) through which goods pass on their route from manufacture to consumption. The key channel decisions include:

- ➔ Choosing intermediaries
- ➔ Determining the implications (from a PD point of view) of alternative channel structures
- ➔ Assessing the available margins.

It follows from the nature of these decisions that the main focus of a channel audit will be on structural factors on the one hand and on cost/margin factors on the other.

2 The PDM audit

There are three primary elements within this audit: that of company profile (which includes the handling cost characteristics of the product range and the service level that is needed in the light of market conditions); PDM developments (both of a technological and contextual nature); and the current system's capability.

Cost aspects exist in each of these elements, but operating costs loom largest in the latter, since it is predominantly concerned with costs and capacity. For example, some of the items that will be subjected to audit will include those shown in Figure 18.1.

3 The competitive audit

Through this phase it should be possible to ascertain the quality of competitors' distribution policies, etc., and especially the level of service that competitors are able to offer (and maintain). Within the competitive audit, regard should also be given to channel structures, pricing and discount policies, and market shares.

4 The customer service audit

Given that the level of service is at the centre of physical distribution management, it is essential to monitor regularly its cost and quality characteristics.

A very thorough approach to the distribution audit is that developed at the Cranfield School of Management by Christopher and colleagues (see Christopher et al., 1977).

Kotler (1984) has offered the view that auditing is the ultimate control measure, although it can be seen as a means of linking the notions of efficiency and effectiveness. It achieves this latter purpose not only by evaluating performance in terms of inputs used and outputs generated, but also by evaluating the assumptions underlying marketing strategies. The fact that audits are expensive and time-consuming – especially when undertaken in a comprehensive, horizontal manner – may appear to contradict the striving for efficiency. However, by focusing on doing the right thing they should help in ensuring effectiveness, which is of greater importance.

Selecting the right person to carry out the audit has been addressed by Kling (1985). He observed that a balance of experience and objectivity is needed, which tends to favour outside auditors who have a broader range of experience than insiders and who can stand back in a reasonably impartial way from policies and procedures that they were not involved in either formulating or implementing. The range of possible auditors includes:

- 1 Self-audit
- 2 Audit from across (i.e. by a colleague in another function but at the same level as the manager whose activities are being audited)
- 3 Audit from above (i.e. by the manager's superior)
- 4 Company auditing office
- 5 Company task-force audit (i.e. a team set up specifically to conduct the audit)
- 6 Outside auditors.

Capacity utilization	<ul style="list-style-type: none"> ➔ Warehouse ➔ Transportation ➔ Flexibility and expansion scope
Warehouse facilities	<ul style="list-style-type: none"> ➔ Total costs ➔ Age and maintenance costs ➔ Flexibility throughput/period ➔ Total throughput/period ➔ Returns handled – number <ul style="list-style-type: none"> – recovery time ➔ Picking accuracy ➔ Service levels/back orders ➔ Cube utilization ➔ Cost of cube bought out
Inventory	<ul style="list-style-type: none"> ➔ Total inventory holding costs ➔ Product group costs ➔ Service levels – total <ul style="list-style-type: none"> – plant – field ➔ Field inventory holding costs ➔ Transfers – number <ul style="list-style-type: none"> – volume ➔ Stock-out effects – loss of business <ul style="list-style-type: none"> – rectification costs
Transportation	<ul style="list-style-type: none"> ➔ Total costs ➔ Production to field units ➔ Field units to customers ➔ Vehicle utilization ➔ Vehicle cube utilization ➔ Total volumes shipped ➔ Cost per mile – volumes shipped <ul style="list-style-type: none"> – cases/pallets shipped ➔ Costs of service bought out ➔ Costs by mode/comparisons
Communications	<ul style="list-style-type: none"> ➔ Total costs ➔ Order communication times – method <ul style="list-style-type: none"> – cost ➔ Time and costs per line item per order method for: <ul style="list-style-type: none"> – order processing and registration – credit investigation – invoice and delivery note preparation – statement preparation ➔ Number and cost of customer queries ➔ Salesmen's – calls/day <ul style="list-style-type: none"> – calls/territory/day – calls/product group/day – calls/customer group/day ➔ Salesmen's use of time – selling <ul style="list-style-type: none"> – inventory checking – merchandising – order processing
Unitization	<ul style="list-style-type: none"> ➔ Total costs ➔ Volumes shipped ➔ Unitization method/proportions of <ul style="list-style-type: none"> – pallets – roll pallets – containers ➔ Costs of assembly and handling by load type
Service achieved (by market segment)	<ul style="list-style-type: none"> ➔ Total costs ➔ Service levels operated/costs ➔ Delivery times ➔ Delivery reliability ➔ Order processing and progressing ➔ Order picking efficiency ➔ Claims procedure/time/cost
Volume throughput	<ul style="list-style-type: none"> ➔ Total throughout – volume <ul style="list-style-type: none"> – weight – units ➔ Total costs ➔ Throughput/field locations – volume <ul style="list-style-type: none"> – weight – units ➔ Throughput fluctuations ➔ Flexibility (capacity availability/time)

Figure 18.1 Distribution audit

It may be better to have a combination of category 6 with one of categories 2–5, thereby bringing together an external view with the perspective of insiders in a joint endeavour. There is little evidence of support for category 1, although it exists as a possibility in the absence of any alternative.

In carrying out a marketing audit it will be evident that the enterprise needs to exhibit adaptive behaviour if it is to remain goal striving in a dynamic environment. Effectiveness is concerned with this ability to achieve goals in an ever-changing context.

Budgeting

Budgeting (or profit planning) is perhaps the widest-ranging control technique in that it covers the entire organization rather than merely sections of it (see Wilson, 1999a).

A budget is a quantitative plan of action that aids in the coordination and control of the acquisition, allocation and utilization of resources over a given period of time. The building of the budget may be looked upon as the integration of the varied interests that constitute the organization into a programme that all have agreed is workable in attempting to attain objectives.

Budgetary planning and control work through the formal organization viewing it as a series of responsibility centres and attempting to isolate the performance measurement of one module from the effects of the performance of others.

Budgeting involves more than just forecasting, since it concerns the planned manipulation of all the variables that determine the company's performance in an effort to arrive at some preferred position in the future. The agreed plan must be developed in a coordinated manner if the requirements of each subsystem are to be balanced in line with company objectives. Each manager must consider the relationship of his or her responsibility centre (or department, or subsystem) to all others and to the company as a whole in the budgetary planning phase. This tends to reduce departmental bias and empire building, as well as isolating weaknesses in the organizational structure and highlighting problems of communication. Furthermore, it encourages the delegation of authority by a reliance on the principle of management by exception.

Having determined the plan, this provides the frame of reference for judging subsequent performance. There can be no doubt that *budgeted* performance is a better benchmark than past performance on account of the inefficiencies that are usually hidden in the latter and the effect of constantly changing conditions.

There are essentially two types of budget: the long term and the short term. Time obviously distinguishes one from the other, and this raises the point that users of budgets should not be unduly influenced by conventional accounting periods – the budget period that is most meaningful to the company should be adopted. For example, the life cycle of a product from its development right through to its deletion is in many ways a more natural budgetary period than calendar units, because it links marketing, production and financial planning on a unified basis. The actual choice of a budget period will tend to depend very much on the company's ability to forecast accurately.

Typically, however, budgets tend to be compiled on an annual basis, with this time span being broken down into lesser time intervals for reporting, scheduling and control

reasons (i.e. half years, quarters, months and even weeks in the case of production and sales activities).

Within this framework of one year the *operating budget* is prepared. This is composed of two parts, with each part looking at the same things in a slightly different way, but both arriving at the same net profit and return on investment. These two parts are:

- 1 The programme (or activity) budget, which specifies the operations that will be performed during the forthcoming period. The most logical way to present this budget is to show, for each product, the expected revenues and their associated costs. The result is an impersonal portrayal of the expected future that is useful in ensuring that a balance exists amongst the various activities, profit margins and volumes – in other words, this is the plan.
- 2 The responsibility budget, which specifies the annual plan in terms of individual responsibilities. This is primarily a control device that indicates the target level of performance, but the personalized costs and revenues in this budget must be controllable at the level at which they are planned and reported.

The significance of these two ways of dealing with the operating budget is of importance as the programme budget is the outcome of the planning phase, whereas the responsibility budget is the starting point for the control phase. The former need not correspond to the organizational structure but the latter must. Consequently, the plan must be translated into the control prior to the time of execution and communicated to those involved in order that no one will be in any doubt as to precisely what is expected of him or her.

Given these two complementary aspects of the operating budget, there are two basic ways in which the budget may be prepared:

- 1 Periodic budgeting, in which a plan is prepared for the next financial year with a minimum of revision as the year goes by. Generally, the total expected annual expenditure will be spread over the year on a monthly basis on the strength of the behaviour of the elemental costs. Thus, 'salaries' will be spread over the months simply as one-twelfth of the expected annual cost per month, but seasonal variations in sales will require a little more attention to be paid to marketing and production costs and their behaviour over time.
- 2 Continuous (or rolling) budgeting, in which a tentative annual plan is prepared with, say, the first quarter by month in great detail, the second and third quarters in lesser detail, and the fourth quarter in outline only. Every month (or perhaps every quarter) the budget can then be revised by adding the required detail to the next month (or quarter), filling in some of the vagueness in the other remaining months (or quarters), and adding on a new month (or quarter) in such a way that the plan still extends one year ahead. Such a budgeting procedure attempts to accommodate changing conditions and uncertainty, and is highly desirable in that it forces management constantly to think in concrete terms about the forthcoming *year* regardless of where one happens to be in the present *financial year*.

Periodic budgeting will often be satisfactory for companies in stable industries that are able to make relatively accurate forecasts covering the planning period. Conversely, rolling budgeting is of greater value in the more usual cases of somewhat irregular cyclical activity amid the uncertainties of consumer demand.

Whether the concern is with long-term or short-term budgeting, or with continuous or period budgeting, there are certain fundamental requirements that must be met if budgeting is to be of maximum value. Briefly, these requirements are:

- 1 Established objectives
- 2 Top management sponsorship and support
- 3 A knowledge of cost behaviour
- 4 Flexibility
- 5 A specified time period
- 6 Adequate systems support
- 7 An effective organizational structure
- 8 A sufficient level of education in budgetary practice.

If these prerequisites exist, then budgeting should enable the company to improve its effectiveness by planning for the future and controlling the execution of the plan by comparing actual results with the desired level of performance.

Deviations between actual and budgeted results will be of managerial concern for such reasons as the following:

- ➔ To highlight errors in budgeting procedures
- ➔ To indicate the need for budget revision
- ➔ To pinpoint those activities requiring remedial attention.

The principles of management by exception should be applied to this process of comparison with the focusing of attention on *significant* variations. However, if the budgeted level of activity differs from the actual level of activity, it will be apparent that variances of an artificial nature arise – such variances are based purely on volume rather than efficiency. This emphasizes the need for flexibility within the budgeting system: it should be able to allow for varying circumstances by recognizing and adapting to significant changes in the fundamental operating conditions of the firm. Such adaptability can be achieved by a *flexible budget*.

In a flexible budgeting system the budgeted cost is adjusted in accordance with the level of activity experienced in the budget period. For example, a budget that is based on sales of 10 000 units during a particular period is of little value for control purposes if 12 000 units (or 8000 units) are actually sold. The sales manager will be necessarily held responsible for the volume variance, but the level of commission, order processing/invoicing, freight and similar cost-incurring activities will tend to depend on the actual level of activity, which requires that the budget be adjusted in order to show the efficient budgeted level of expenditure for the achieved level of activity.

A simple way of building a flexible budget is to start with a budget for the most likely level of activity and then to derive budgets for 5, 10 and 15 per cent above and below this level.

The major advantage of the flexible budget is its ability to specify the budgeted level of costs, revenues and profits *without revision* when sales and production programmes are changed. It achieves this by distinguishing between those costs that vary with changes in the level of activity and those that do not. In other words, it is based on a thorough knowledge of cost behaviour patterns.

A static budget (i.e. a fixed budget that relates to a single level of activity) can result in misleading actions. An example should make this clear. Figure 18.2 shows the comparison of a budgeted level of 10 000 units with an actual sales level of 11 000 units. It appears that profit has improved by £300, *but* not all costs vary in the same way, so a flexible budget analysis is called for. This is shown in Figure 18.3 and indicates clearly that the comparison should be between the actual level of activity and the budgeted costs, revenue and profit for that level. While profit was higher than the budgeted figure, the difference was only £20 rather than £300.

	Budget	Actual	Variance
Sales (units)	10,000	11,000	+1,000
Sales revenue	£15,000	£16,500	+£1,500
Expenditure: Direct	10,000	11,000	+1,000
Indirect	4,000	4,200	+200
Profit	£1,000	£1,300	+£300

Figure 18.2 Fixed budget analysis

	Fixed budget	Flexible actual	Actual	Variance
Sales (units)	10,000	11,000	11,000	–
Sales revenue	£15,000	16,500	16,500	–
Expenditure: Direct	10,000	11,000	11,000	–
Fixed indirect	1,500	1,500	1,450	–50
Variable indirect	2,000	2,200	2,240	+40
Mixed indirect	500	520	510	–10
Profit	£1,000	£1,280	£1,300	+20

Figure 18.3 Flexible budget analysis

The need to distinguish fixed costs (which remain constant in total during a period) from variable costs (which remain constant per unit of output) is of paramount importance, and any costs that are neither one nor the other (i.e. semi-fixed or semi-variable expenses) can usefully be classified as mixed costs. Apart from showing the cost breakdown in some detail, Figure 18.3 shows the target level of activity (i.e. the fixed budget) as well as the efficiency with which the actual level of activity was attained. This information is vital to effective control.

It is important to appreciate that budgeting cannot take the place of management, but rather forms a vital aid to management. Indeed, budgets are based on estimates, and judgement must be applied to determine how valid the estimates are and, consequently, how significant deviations are from those estimates. The adequacy of planning and controlling operations hinges critically upon the adequacy of managerial judgement.

In the light of the need for judgement it is clear that budgeting should not introduce unnecessary rigidity into the management process. A budget should be a flexible framework that is capable of accommodating changing circumstances, but care must be exercised lest the budgetary targets come to supersede the objectives of the company. The budget is a means to an end, not an end in itself.

In its traditional application, budgeting has a major weakness in planning and another in control: in the planning phase there is usually consideration of too few alternative courses of action from which the best is to be selected, and in the control phase it is difficult to adjust operating budgets to reflect rapidly changing conditions – they are at best flexible with respect to changing sales or production levels.

Nevertheless, these weaknesses should not outweigh the general role of budgeting in drawing attention to problem areas, encouraging forward thinking and developing company-wide cooperation.

Other approaches to budgeting: ZBB and PPBS

In order to accommodate the particular needs of non-profit organizations (such as government agencies), as well as providing a focus for more rigorous thinking in relation to *programmed* or *discretionary costs* (i.e. those which are determined purely by managerial discretion – such as R&D, training and many marketing outlays), a number of recent developments in budgeting techniques are worthy of mention. In particular, zero-base budgeting (ZBB) and output budgeting (which is also known as a planning-programming-budgeting system, hence the initials PPBS) have generated considerable interest, so we will take note of them at this point.

Zero-base budgeting (ZBB)

Among other failings it is generally agreed that traditional budgeting (or *incremental budgeting* as it is often known due to the tendency to add on a bit more – an increment – to last year's budget level in order to arrive at a figure for next year) is number-oriented, fails to identify priorities, and starts with the existing level of activity or expenditure as an established base, whereas it might be more useful to managers to have a technique

that was decision-oriented, helped in determining priorities, and sought to reassess the current level of expenditure.

It will be appreciated from this last point that in taking as given the current level of expenditure, and the activities that this represents, the traditional approach to budgeting – by looking only at desired increases or, occasionally, decreases – is ignoring the majority of the organization's expenditure. This is rather myopic.

The zero-base budgeting alternative is to evaluate *simultaneously* existing and new ways of achieving specified ends in order to establish priorities among them, which could mean that there are trade-offs between existing and new activities. For example, a new Project A that is considered to be more desirable than an existing Project B may be resourced by terminating Project B. In essence, the approach is carried out in two stages:

- 1 Decision packages are identified within each decision unit. These decision units are essentially discrete activities that can be described in a way that separates them from other activities of the organization. The decision packages cover both existing and projected incremental activities, and the organizational units responsible for carrying them out are much akin to the responsibility centres that were discussed earlier in the chapter. The object is to define for each decision unit the basic requirements that are needed if it is to perform the function for which it was established. Any costs in excess of this basic level are deemed incremental. (It will be seen, therefore, that the title 'zero base' is something of a misnomer, since the base is certainly greater than zero!) In considering what is needed in order to fulfil a particular purpose, over and above the base level, it is probable that alternative ways of achieving the same end will be identified, and these should be described and evaluated as they arise – these are the decision packages.
- 2 Once the manager of a decision unit has submitted his or her statement of evaluated decision packages to his or her superior, it is the latter's job to assign priorities to the various submissions from all subordinates, and to select the highest-ranking decision packages that come within the available budget limit. There are a number of ways in which priorities can be determined, all of which presuppose some explicit criterion of effectiveness in order that competing packages may be ranked.

This approach is logical and has much to commend it in relation to discretionary outlays.

Output budgeting

In the traditional approach to budgeting there tends to be an overall emphasis on the functional areas of an organization. Thus, one has the budget for the marketing function and that for the data processing department. However, no organization was ever established in order that it might have these functions as a definition of what it exists to achieve, so it is helpful to look at the situation from another angle.

In a typical business organization there will be functions such as those shown in Figure 18.4, but the organization really exists in order to achieve various purposes, which have been simplified in the 'missions' of Figure 18.5. In developing a business plan, the major concern is with the 'missions', subject to the resource limitations within

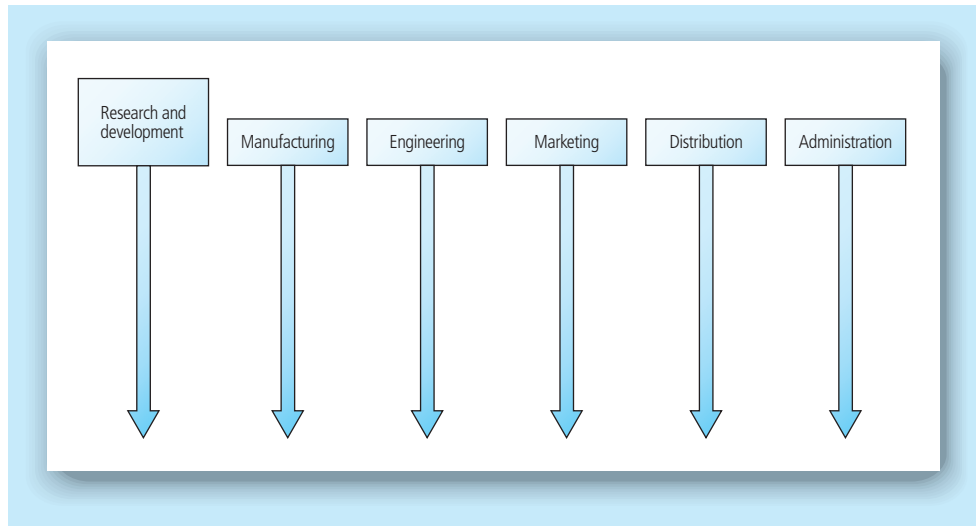


Figure 18.4 Functional activities

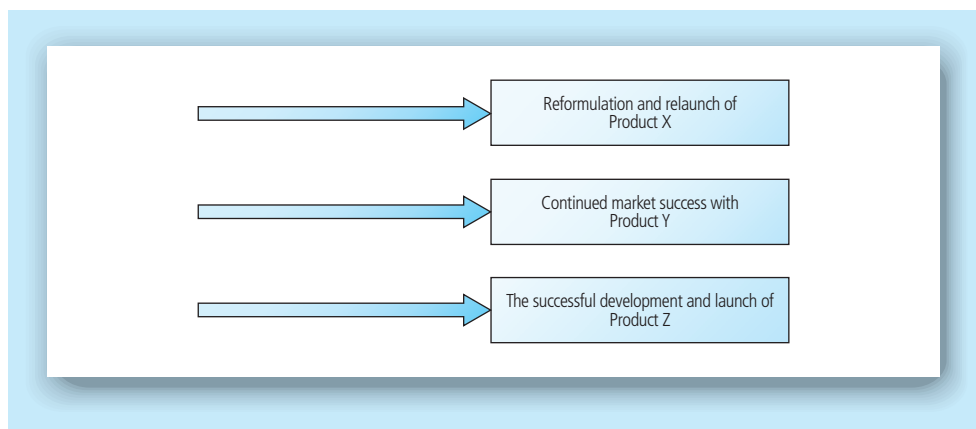


Figure 18.5 Missions

the functions, etc., whereas the development of controls will usually be via the responsibility centres that are contained within the functions.

If we now superimpose the (horizontal) missions over the (vertical) functions, we have the crux of the output budgeting approach. What this does is to focus attention on the purposes to be served by the organization, as shown by the missions, and the contribution that each function must make to each mission if the missions are to be successful. Figure 18.6 suggests this in the most simplified manner.

Variance analysis

When actual selling prices differ from standard selling prices, a *sales price variance* can be computed. Standard selling prices will be used in compiling budgets, but it may be necessary to adapt to changing market conditions by raising or lowering prices, so it

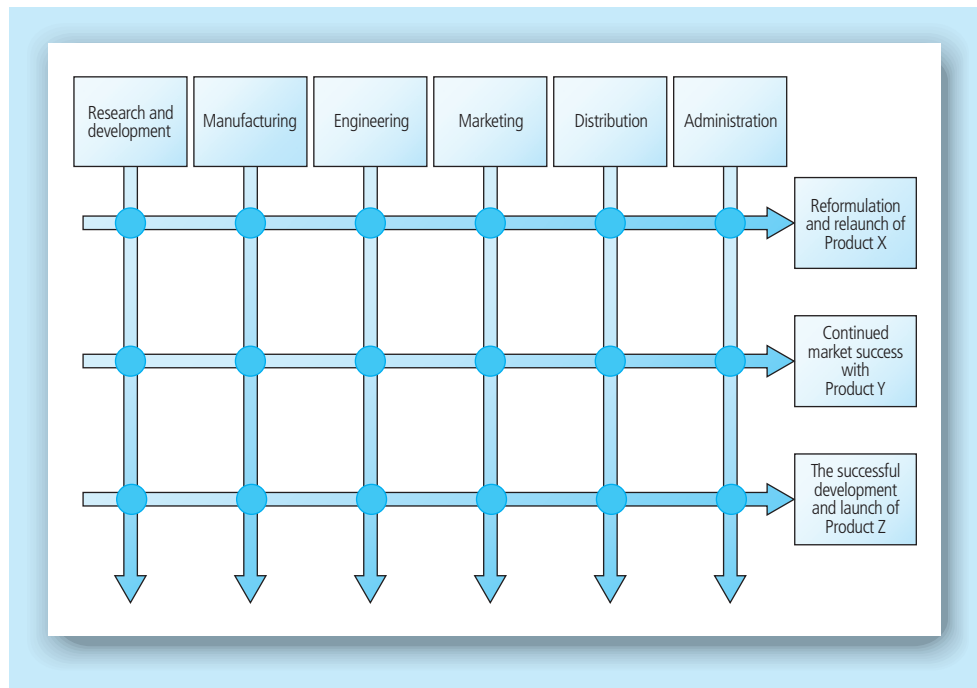


Figure 18.6 A simplified output budgeting format

becomes desirable to segregate variances due to price changes from variances due to changes in quantity and product mix.

Quantity and mix are the two components of *sales volume variances*, and variations in profit can be explained to some extent by analysing sales quantity and sales mix.

The formulae for computing sales variances are:

Sales price variance = actual units sold \times (actual price – standard price)

Sales volume variance = sales quantity variance + sales mix variance

Sales quantity variance = budgeted profit on budgeted sales
– expected profit on actual sales

Sales mix variance = expected profit on actual sales
– standard profit on actual sales.

‘Expected profit on actual sales’ is calculated as though profit increases or decreases proportionately with changes in the level of sales. ‘Standard profit on actual sales’ is the sum of the standard profit for all units sold. (For a single product enterprise, or in one where the profit per unit of sales is constant over the product range, the standard profit on actual sales is equal to the expected profit on actual sales, and the sales mix variance will necessarily be nil.)

Let us clarify the approach with an example. Assume budgeted sales of a company’s two products for a forthcoming period were as follows:

Product A 500 units at £2.00 per unit

Product B 700 units at £1.50 per unit

and budgeted costs were:

Product A £1.75 per unit

Product B £1.30 per unit

Actual costs were in line with the budgeted costs, and actual sales for the period were:

Product A 560 units at £1.95 per unit

Product B 710 units at £1.40 per unit

Budgeted sales revenue	= £[(500 × 2.00) + (700 × 1.50)]	= £2,050
Actual sales revenue	= £[(560 × 1.95) + (710 × 1.40)]	= £2,086
Budgeted profit	= £[(500 × 0.25) + (700 × 0.20)]	= £265
Actual profit	= £[(560 × 0.25) + (710 × 0.10)]	= <u>£211</u>
Total sales variance		<u>-£54</u>
Sales price variance	= £[560 × (1.95 - 2.00)] + [710 × (1.40 - 1.50)]	= <u>-£99</u>
Sales volume variance:		
Quantity variance	= £265 - [2,086/2,050 × 265]	= -£4
Mix variance	= £269 - [(560 × 0.25) + (710 × 0.20)]	= <u>-£13</u>
Sales volume variance		<u>-£17</u>
Total sales variance		<u>-£116</u>

Standards can be developed for repetitive activities, and it is possible to determine standards in a marketing context for the following illustrative activities:

- ➔ Cost per unit of sales
- ➔ Cost per sales transaction
- ➔ Cost per order received
- ➔ Cost per customer account
- ➔ Cost per mile travelled
- ➔ Cost per sales call made.

The degree of detail can be varied to suit the particular requirements. Thus, 'cost per unit of sales' may be 'advertising cost per £ of sales revenue for Product X' and so on.

It is clearly more difficult to establish precise standards for most marketing activities than is the case in the manufacturing or distribution functions. Physical and mechanical factors are less influential; psychological factors are more prominent; objective measurement is less conspicuous; tolerance limits must be broader; and the range of segments for which marketing standards can be developed is much greater. But the discipline of seeking to establish standards can generate insights into relationships between effort and results that are likely to outweigh any lack of precision.

It is possible for an organization to develop marketing standards by participating in an interfirm comparison scheme (such as the one run by the Centre for Interfirm

Comparison). As Westwick (1987) has shown, integrated sets of ratios and standards can be devised to allow for detailed monitoring of performance (see Sections 3.10–3.12, in Chapter 3).

When budget levels and standards are being developed it is vitally important to note the assumptions on which they have been based, since it is inevitable that circumstances will change and a variety of unanticipated events will occur once the budget is implemented. Bearing this in mind, let us work through an example. Figure 18.7 illustrates an extract from a marketing plan for Product X (column 2), with actual results (column 3) and variances (column 4) being shown for a particular operating period.

The unfavourable contribution variance of £150 000 shown at the foot of column 4 is due to two principal causes:

- 1 A variance relating to contribution per unit, and
- 2 A variance relating to sales volume.

In turn, a variance relating to sales volume can be attributed to differences between:

- 3 Actual and anticipated total market size, and
- 4 Actual and anticipated market share.

Therefore, a variation between planned and actual contributions may be due to variations in price per unit, variable cost per unit, total market size and market penetration.

In the case of Product X we have:

- 1 Profit variance:

$$\begin{aligned}(C_a - C_p) \times Q_a &= £(0.35 - 0.40) \times 11,000,000 \\ &= (£550,000)\end{aligned}$$

Item (1)	Plan (2)	Actual (3)	Variance (4)
Revenues:			
Sales (units)	10,000,000	11,000,000	1,000,000
Price per unit (£)	1.00	0.95	0.05
Total revenue (£)	10,000,000	10,450,000	450,000
Market:			
Total market size (units)	25,000,000	30,000,000	5,000,000
Share of market (%)	40.0	36.7	(3.3)
Costs:			
Variable cost per unit (£)	0.60	0.60	–
Contribution:			
Per unit (£)	0.40	0.35	0.05
Total contribution (£)	4,000,000	3,850,000	(150,000)

Figure 18.7 Operating results for Product X

2 Volume variance:

$$(Q_a - Q_p) \times C_p = (11,000,000 - 10,000,000) \times \text{£}0.40 = \text{£}400,000$$

3 Net variance: £

Profit variance	(550,000)
Volume variance	400,000
	<u>£(150,000)</u>

where:

- C_a = actual contribution per unit;
- C_p = planned contribution per unit;
- Q_a = actual quantity sold in units;
- Q_p = planned quantity of sales in units.

Figure 18.8 illustrates the relations.

However, variable 2 can be analysed further to take into account the impact of market size and penetration variations.

4 Market size variance:

$$(M_a - M_p) \times S_p \times C_p = (30,000,000 - 25,000,000) \times 0.4 \times 0.4 = \text{£}800,000$$

5 Market share variance:

$$(S_a - S_p) \times M_a \times C_p = (0.367 - 0.40) \times 30,000,000 \times 0.4 = \text{£}(400,000)$$

6 Volume variance: £

Market size variance	800,000
Market share variance	(400,000)
	<u>£400,000</u>

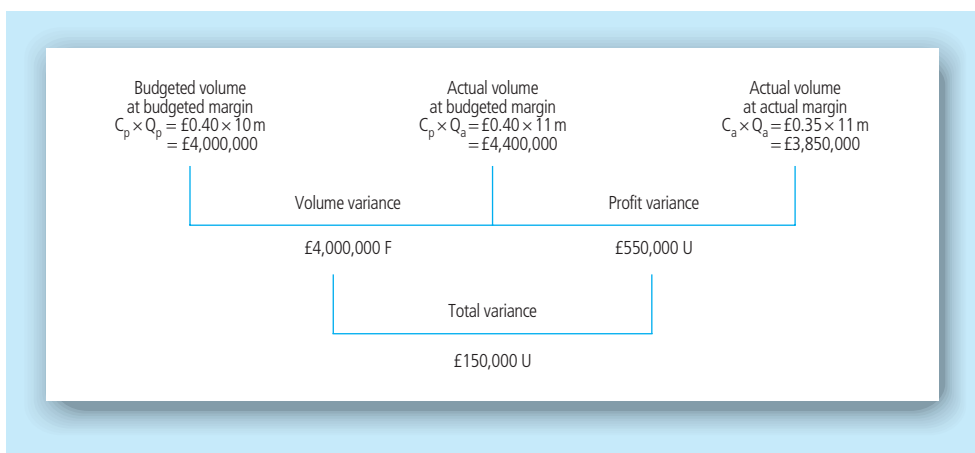


Figure 18.8 Marketing variances – 1

where:

- M_a = actual total market in units;
- M_p = planned total market in units;
- S_a = actual market share;
- S_p = planned market share.

See Figure 18.9, which illustrates these relationships.

In summary, the position now appears thus:

	£	£
Planned profit contribution		4,000,000
Volume variance:		
Market size variance	800,000	
Market share variance	<u>(400,000)</u>	400,000
Profit variance		(550,000)
Actual profit contribution		<u>£3,850,000</u>

But this is not the end of the analysis! Variances arise because of unsatisfactory performance and unsatisfactory plans. It is desirable, therefore, to distinguish variances due to the poor *execution* of plans from those due to the poor *establishing* of plans. In the latter category are likely to be found forecasting errors reflecting faulty assumptions,

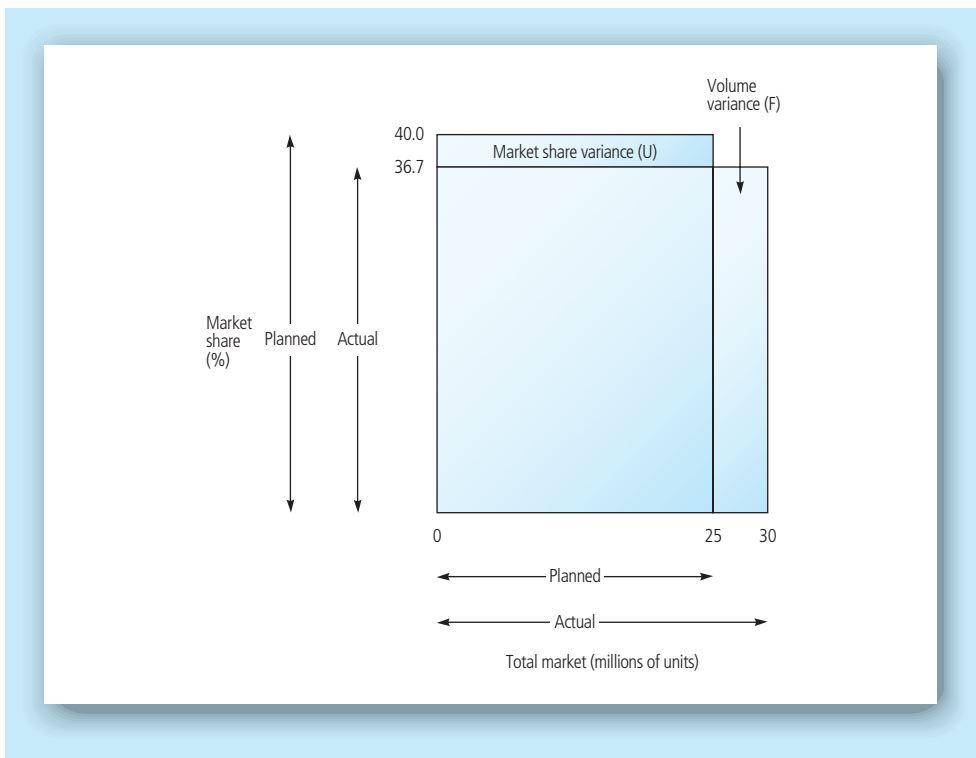


Figure 18.9 Marketing variances – 2

and the estimates of total market size may constitute poor benchmarks for gauging subsequent managerial performance.

It is difficult to determine categorically whether market share variances are primarily the responsibility of forecasters or of those who execute the plans based on forecasts. On the face of it, the primary responsibility is likely to be attached to the latter group.

In interpreting the variances for Product X it can be seen that the favourable volume variance of £400 000 resulted from two variances relating to market size and market share. Both of these are undesirable, since they led to a lower contribution than intended. Had the forecasting group correctly anticipated the larger total market, it should have been possible to devise a better plan to achieve the desired share and profit contribution. The actual outcome suggests that competitive position has been lost due to a loss of market share in a rapidly growing market. This is a serious pointer.

Lower prices resulted in a lower level of contribution per unit, and hence a lower overall profit contribution. The reasons for this need to be established and future plans modified as necessary.

As an approach to improved learning about the links between effort and results – especially in the face of active competitive behaviour – it is helpful to take the above analysis further and to evaluate performance by considering what *should have happened* in the circumstances (which is akin to flexible budgeting, as discussed on pp. 776–8 above).

At the end of the operating period to which Figure 18.7 refers it may become known that a large company with substantial resources made an aggressive entry into the marketplace using lots of promotions and low prices. Furthermore, an unforeseen export demand for Product X may have arisen due to a prolonged strike in the USA's main manufacturer. On the basis of these details, it becomes possible to carry out an *ex post* performance analysis, in which the original plans are revised to take account of what has since become known.

A clearer distinction can be made via *ex post* performance analysis along these lines, since a distinction can be made between:

- ➔ Planning variances due to environmental events that were foreseeable or unforeseeable, and
- ➔ Performance variances that are due to problems in executing the plans.

The situation is summarized in Figure 18.10.

This example has focused on a single product line (Product X), but multi-product companies will typically have product lines with differing cost structures, prices and hence profit characteristics. It will be apparent, therefore, that the *mix* of products sold will have an impact on the overall profit outcome. For example, an enterprise may offer three product lines with budgeted characteristics relating to the next operating period, as given in Figure 18.11.

Each product line has a different contribution per unit, so the total contribution from all lines is dependent upon the particular mix of sales across all product lines. If

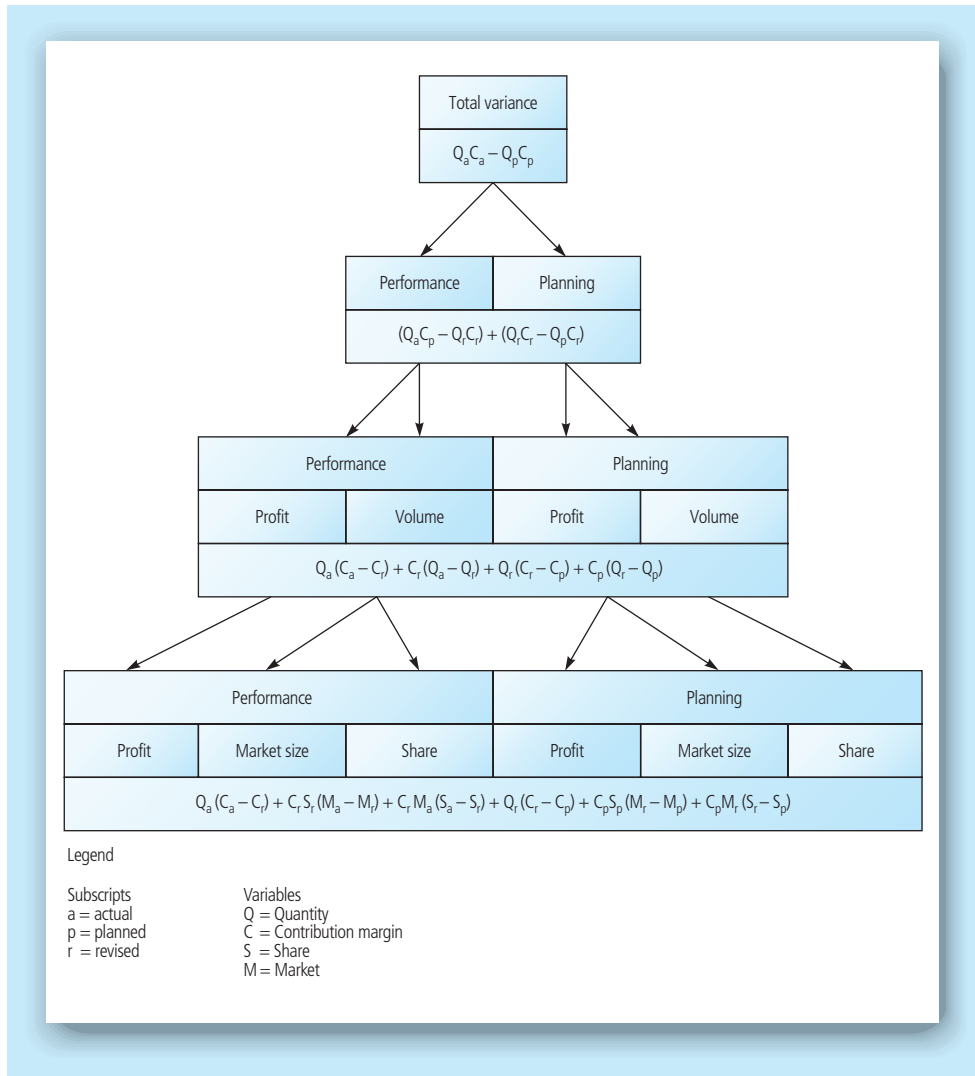


Figure 18.10 Ex post performance analysis (adapted from Hulbert and Toy, 1977)

	Product A	Product B	Product C	Total
Budget sales (units)	100,000	200,000	50,000	
Budgeted unit selling price	£12.00	£10.00	£20.00	
Budgeted unit variable cost	£6.00	£4.50	£8.00	
Budgeted unit contribution	£6.00	£5.50	£12.00	
Budgeted contribution	50%	55%	60%	
Budgeted contribution	£600,000	£1,100,000	£600,000	£2,300,000

Figure 18.11 Budgeted operating results by product line

the actual outcomes for the period in question were as shown in Figure 18.12, we can explain the total variance of £275 000 U (i.e. actual profit contribution £2 025 000 minus budgeted profit contribution £2 300 000) as in Figure 18.13.

In summary we have:

	£
Volume variance	32,863 F
Mix variance	42,863 U
Profit variance	265,000 U
Total variance	<u>£275,000 U</u>

In other words, the total variance was partly due to overall volume being higher than budgeted (355 000 units rather than 350 000, as budgeted), which gives a favourable variance of £32 863, made up of favourable volume variances for each individual product line. The actual mix of sales differed from budget in a way that produced an unfavourable variance of £42 863, made up of unfavourable variances for Products A and C, which were partly offset by a favourable variance for product line B. The actual margins were less than budgeted for product lines B and C, giving an unfavourable profit variance of £265 000.

The volume variance can be analysed further along the lines suggested in the previous example, but the main point to note from this example is the impact that variations in the mix of products sold can have on the profit outcome. If all product lines had the same percentage margin there would be no mix variance, but this situation is not normal, so we need to be aware of the impact of mix changes.

Variance analysis for distribution cost control

As with production costing the analysis of cost variances in distribution costing is the first step towards the goal of identifying the factors that caused the difference between the standard and actual costs so that any inefficiencies can be eliminated. To do this, each enterprise will have to decide what specific variance analyses it may want to use. Often, companies only compute a net variance for their distribution costs and do not

	Product A	Product B	Product C	Total
Actual sales (units)	90,000	220,000	45,000	
Actual unit selling price	£12.00	£9.00	£20.00	
Actual unit variable cost	£6.00	£4.50	£9.00	
Actual unit contribution	£6.00	£4.50	£11.00	
Actual contribution	50%	50%	55%	
Actual contribution	£540,000	£990,000	£495,000	£2,025,000

Figure 18.12 Actual operating results by product line

Product	Budgeted volume at budgeted margin for budgeted mix	Volume variance	Actual volume at budgeted margin for budgeted mix*	Mix variance	Actual volume at budgeted margin for actual mix	Profit variance	Actual volume at actual margin for actual mix
A	100,000 × £6.00 = 600,000	£ 8,580 F	101,430 × £6.00 = 608,580	£ 68,580 U	90,000 × £6.00 = 540,000	£ 0	90,000 × £6.00 = 540,000
B	200,000 × £5.50 = 1,100,000	£ 15,703 F	202,855 × £5.50 = 1,115,703	£ 94,297 F	220,000 × £5.50 = 1,210,000	£ 220,000 U	220,000 × £4.50 = 990,000
C	50,000 × £12.00 = 600,000	£ 8,580 F	50,715 × £12.00 = 608,580	£ 68,580 U	45,000 × £12.00 = 540,000	£ 45,000 U	45,000 × £11.00 = 495,000
Total	£2,300,000	£32,863 F	£2,332,863	£42,863 U	£2,290,000	£265,000 U	£2,025,000

*The budgeted mix was 100,000/(100,000 + 200,000 + 50,000) = 100,000/350,000 = 28.57% for Product A, and so on. Applying this proportion to actual sales units gives 0.2857 (90,000 + 220,000 + 45,000) = 101,430 for Product A, and so on for B and C.

Figure 18.13 Marketing variances – 3

attempt to break the variance down into causal factors. This practice is not to be encouraged, however, since it tends to hide inefficiencies. If the analysis is to be meaningful the variance must be further explained in terms of price and efficiency components. Such price and quantity or efficiency variances can be computed for distribution activities. The price variance is given by:

$$(\text{standard price} - \text{actual price}) \times \text{actual work units}$$

and the quantity (or efficiency) variance is given by:

$$(\text{budgeted work units} - \text{actual work units}) \times \text{standard price.}$$

A variance reporting example

The distribution costs of the Hill Company are analysed by territories: data for the southern territory is shown in Figure 18.14. The warehousing and handling function's standards are:

<i>Variable costs:</i>	<i>Total standard for direct and indirect costs (£)</i>
Receiving	21 per shipment
Pricing, tagging and marking	6 per unit handled
Sorting	5 per order
Handling returns	10 per return
Taking physical inventory	0.50 per unit warehouse unit
Clerical handling of shipping orders	2 per item
 <i>Fixed costs:</i>	
Rent	600 per month per territory
Depreciation	450 per month per territory

The following units of variability were budgeted and recorded for the month of January 1998:

	Budgeted	Actual
Shipments	400	420
Units handled	200	223
Orders	110	108
Returns	70	71
Warehouse unit	1,600	1,630
Item	750	780

The southern territory's actual direct costs for the month of January 1998 were as follows:

Receiving	£6,400
Pricing, tagging and marking	1,115
Sorting	565

HILL COMPANY – SOUTHERN TERRITORY
Expense variance report – warehousing and handling
 January 1998

	(1)	(2)	(3)	(2 – 1)	(3 – 2)	(3 – 1)
	Actual cost (actual @ actual price)	Actual units @ standard price	Budgeted costs (budgeted units @ standard price)	Price variance	Efficiency variance	Net variance
Detailed function:						
Receiving:						
direct costs	£6,400					
indirect costs	<u>2,100</u>					
	£8,500	£8,820 (420 × £21)	£8,400 (400 × £21)	£320 F	£420 U	£100 U
Total						
Pricing, tagging and marking:						
direct costs	1,115	1,338 (223 × £6)	1,200 (200 × £6)	223 F	138 U	85 F
Sorting, direct costs	565	540 (108 × £5)	550 (110 × £5)	25 U	10 F	15 U
Handling returns:						
direct costs	680	710 (71 × £10)	700 (70 × £10)	30 F	10 U	20 F
Taking physical inventory	<u>880</u>	815 (1,630 × £0.50)	800 (1,600 × £0.50)	65 U	15 U	80 U
Clerical handling of shipping orders:						
direct costs	£ 500					
indirect costs	<u>1,060</u>					
	£1,560	1,560 (780 × £2)	1,500 (750 × £2)	0	60 U	60 U
Total	<u>£13,300</u>		<u>£13,150</u>	<u>£483 F</u>	<u>£633 U</u>	<u>£150 U</u>
Total variable expense						
Fixed expense:						
rent	650		600			50 U
depreciation	<u>445</u>		<u>450</u>			5 F
Total warehousing and handling	<u>£14,395</u>		<u>£14,200</u>			<u>£195 U</u>

F = favourable; U = unfavourable

Figure 18.14 Distribution cost variances

Handling returns	680
Taking physical inventory	880
Clerical handling of shipping orders	500
Rent	650
Depreciation	445

The company allocates the following actual indirect costs to its southern and northern territories:

Receiving (allocated on actual shipments: southern 420, northern 80)	£2,500
Clerical handling of shipping orders (allocated on actual items: southern 780, northern 120)	1,223

- ➔ *Efficiency variance.* Shipments received is the unit of variability chosen for the receiving function. There were a total of 420 shipments made, while only 400 shipments were budgeted. This results in an unfavourable efficiency variance because actual shipments exceeded those budgeted. (It should be noted here that care must be used in analysing distribution cost variances, because it is easy to misinterpret the results associated with such costs. Each cost variance is considered favourable or unfavourable as far as that individual detailed function is concerned, not for its effect on the overall company.) The efficiency variance in this case is unfavourable because twenty more shipments were made than planned. Hence, orders of larger quantities should be encouraged to save costs in receiving.
- ➔ *Price variance.* The actual cost of £20.238 (i.e. £8500 total actual cost of receiving as shown in Figure 18.14 ÷ 420 actual units) for each shipment received is less than the standard price of £21.00, which results in a favourable price variance. This difference in price is multiplied by the actual shipments to give a total favourable price variance of £320. It is not necessary to compute the actual cost per unit using the format illustrated in Figure 18.14, since the price variance can be determined by comparing total actual cost to the actual units at standard price shown in column 2.

Efficiency and price variance are computed for variable costs only. Only a net variance is computed for the two fixed expenses shown in Figure 18.14. This measures the difference between budgeted costs (budgeted units at standard price) and actual costs (actual units at actual price).

Other models

A useful model for assessing product line performance has been proposed (and tested) by Diamantopoulos and Mathews (1990). The model is based on the need to evaluate product performance in a multi-product setting using readily available product information and widely used performance indicators in a systematic way. Not least, it was deemed essential that the model be clearly understood by its intended users (product

managers), otherwise, from an implementation point of view, it would not have been worthwhile. Figure 18.15 shows the model.

Gross profit is used as the primary performance indicator since this measure is easily provided without additional analysis. If the gross profit being generated is below par this may be due to:

- ➔ Insufficient sales volume
- ➔ High unit cost
- ➔ Prices that are too low.

Investigation should reveal which of these possible causes applies. If the *unit* gross profit is satisfactory, for example, but the product line's *overall* gross profit is unsatisfactory, the remedy may be to increase volume by revising the marketing mix in a suitable way. There may be products having unsatisfactory gross margins that are not amenable to corrective action. In this case their continued role in the range needs to be questioned.

Areas in which the model is particularly useful are:

- 1 Pricing (especially the effectiveness of existing pricing policies in terms of profit and volume results)
- 2 New product introductions (by using previous introductions to set realistic benchmark expectations for new products)
- 3 Product deletions (using warning signals as the stimulus to further investigations).

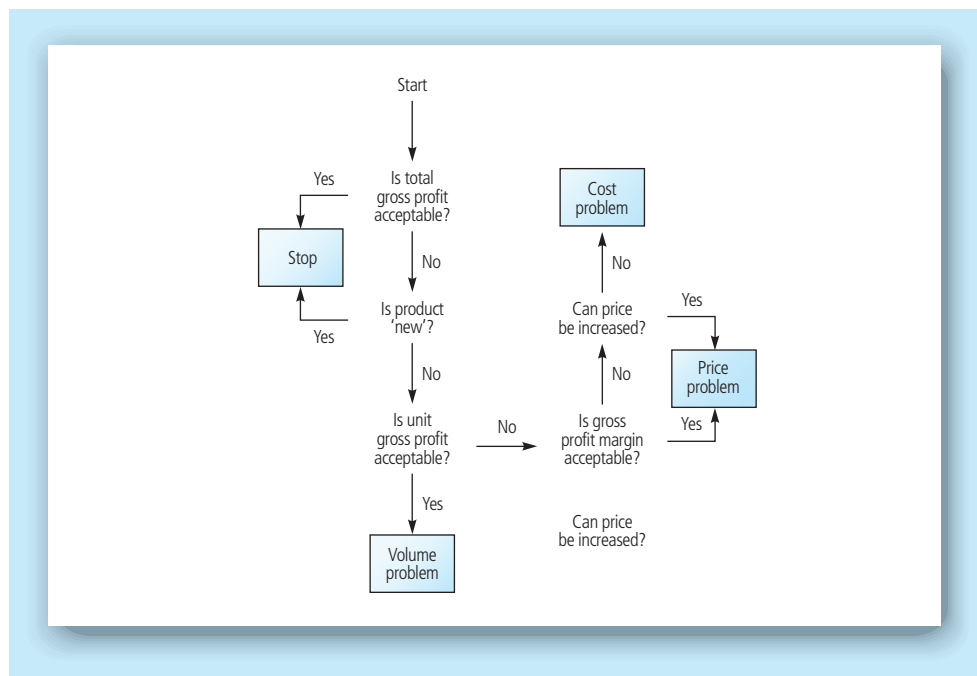


Figure 18.15 A model for product performance analysis (source: Diamantopoulos and Mathews, 1990, p. 9)

Despite the need to specify target values for each element of the model (i.e. total gross profit, unit gross profit, newness of product, gross profit margin, and price), this does not take away the importance of managerial judgement in arriving at an overall assessment of each product's performance. Indeed, judgement is needed in specifying the quantified target values themselves, as well as in interpreting any given product's standing relative to those targets. When a particular product's performance is considered satisfactory it is not self-evident that it should be ignored: in order to ensure *sustained* satisfactory performance, it may be necessary to take action in anticipation of future environmental changes (i.e. feedforward control).

A variation on the product line model that deals with sales deviations from plan is shown in Figure 18.16. This protocol follows a series of logical steps. Having identified a variance that is deemed to be significant (i.e. is unlikely to have arisen by chance), the question is raised as to whether this may be due to controllable or uncontrollable factors. ('Uncontrollable' is used here in the sense of being beyond the influence of managers in the given enterprise, or beyond the forecasting ability of relevant personnel, which might cover changing market conditions leading to a decline in industry sales, or unanticipated competitive actions.)

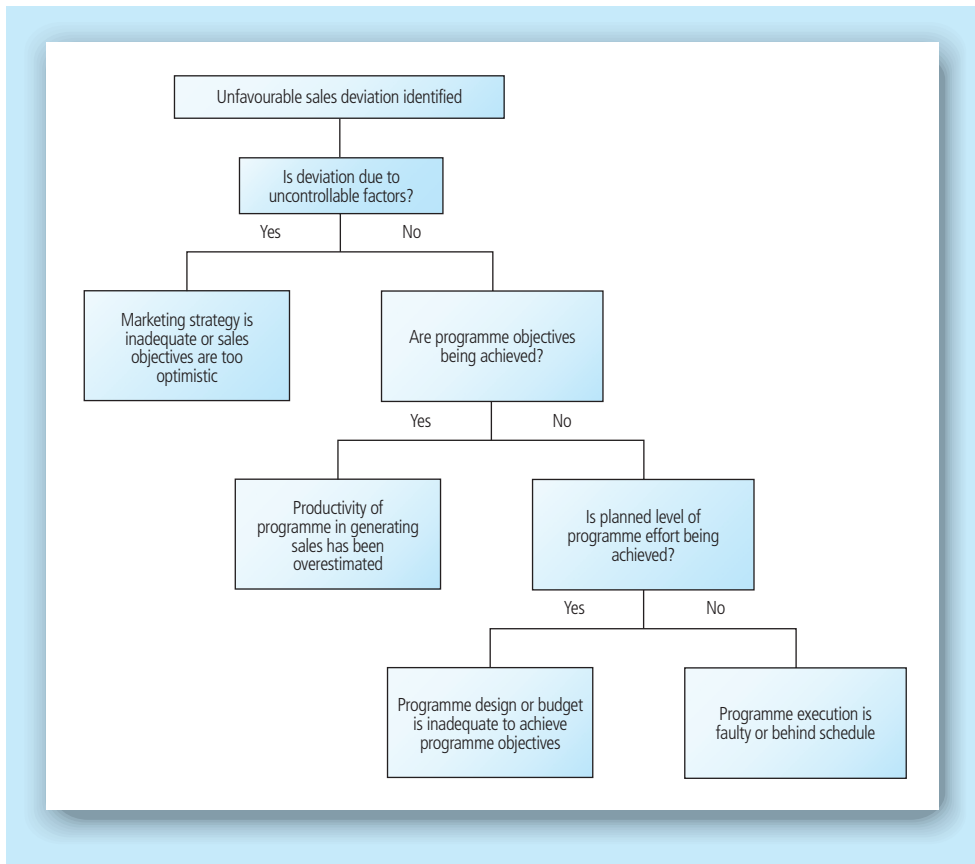


Figure 18.16 Analysing sales deviations (source: Gultinan and Paul, 1988, p. 399)

If the explanation for the variance is not found at this first stage, the next stage raises the question of the performance of marketing programmes. This can be addressed at two levels:

- 1 The degree to which programme objectives are being achieved
- 2 The degree to which planned programme effort is being achieved.

If the degree of effort (as represented by actual sales levels, or advertising coverage) is not as planned, it is unlikely that either programme objectives or sales objectives are being achieved. On the other hand, if the planned input of effort is being achieved but programme objectives (such as brand awareness levels or the number of new accounts) are not, it is probable that either the budget is inadequate or the design of the programme (e.g. sales appeal, pricing level, advertising copy) is ineffective.

It may be found that the sales variance is not attributable to faulty programmes or lack of effort, but is due to the sales productivity of the programme being overstimulated or the implementation of the programme being behind schedule.

In so far as sales variances reflect revenue generation, there is a corresponding need to examine the variances among the costs incurred and budget figures to secure control over the profit consequences of sales activities.

The variance investigation decision

A major inhibiting factor in seeking to control via feedforward systems is our limited ability to make reliable estimates of the outcomes of future events. (This reflects our modest understanding of causal relationships both within the subsystems of the enterprise and between the enterprise and its environment.) All planning is based on estimates (e.g. of prices, costs, volumes) and actual outcomes will rarely be precisely in line with these estimates – some variation is inevitable. Should we expect a manager to investigate every variance that might be reported when we know that some deviation between actual outcomes and budgeted outcomes is bound to occur? On the other hand, if no variances are investigated the control potential of this form of managerial control system is being ignored. An appropriate course of action lies somewhere between these two extremes.

Causes of variances (or 'deviations') can be categorized in the following broad way (after Demski, 1980), with particular variances often being due to one or more deviations:

- 1 Implementation deviation results from a human or mechanical failure to achieve an attainable outcome, e.g. if the mileage rate payable to employees using their own vehicles for business trips is 35p per mile, but due to clerical error this is being paid at only 25p per mile, the required corrective action is easy to specify. The cost of correction will be exceeded by the benefits.
- 2 Prediction deviation results from errors in specifying the parameter values in a decision model, e.g. in determining overhead absorption rates *ex ante* predictions must be

made of, *inter alia*, the future level of activity. If the predictions are wrong, then the overhead absorption rate will be wrong and variances will result.

- 3 Measurement deviation arises as a result of error in measuring the actual outcome – such as incorrectly adding up the number of calls made in Region X, or the number of units sold of Product P.
- 4 Model deviation arises as a result of an erroneous formulation in a decision model. For example, in formulating a linear programme the constraints relating to the availability of input factors may be incorrectly specified.
- 5 Random deviations due to chance fluctuations of a parameter for which no cause can be assigned. These deviations do not call for corrective action, but in order to identify the causes of variances it is helpful to separate random deviations from deviations 1–4 above, in order that the significance of the latter might be established.

While these five categories of deviation appear to be mutually exclusive, their interdependencies should not be underestimated. The traditional view is to assume that variances are due to implementation deviations, but this is patently simplistic. It is also potentially inequitable, since it may deem individual managers to be responsible for variances that arise from reasons beyond their control (such as deviations 3 and 5 above).

In setting up benchmarks (e.g. budget targets or standard costs) it is important to recognize that a range of possible outcomes in the vicinity of the benchmark will usually be acceptable. In other words, random variations around the benchmark are to be expected, and searching for causes of variances within the acceptable range of outcomes will incur costs without generating benefits. Only when variances fall outside the acceptable range will further investigation be desirable.

This prompts the operational question of how one actually determines whether a variance should be investigated. As Figure 18.17 suggests, if it was known in advance that a variance arose on a random basis it would not be necessary to investigate it, since

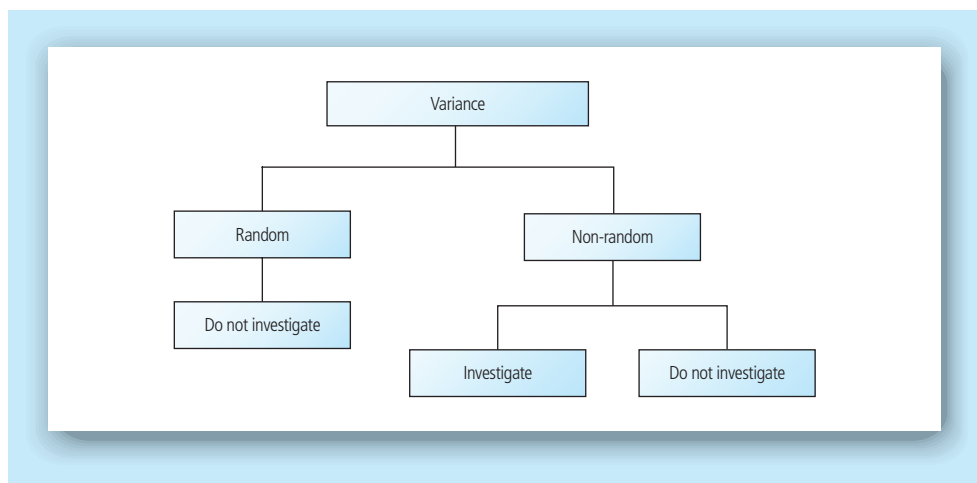


Figure 18.17 The variance investigation decision

there will be no assignable cause. On the other hand, if a variance is of a non-random nature it would not pay to ignore it if it was significant.

How can significance be determined? This boils down to a statistical question, and the technique that is of proven help is that developed for use in quality control situations, to which we will turn very shortly.

A more conventional approach to evaluating the significance of variances is either to:

- 1 Look at the absolute size of the variance (i.e. actual – standard) such that all variances greater than, say, £1000 are investigated, or
- 2 Compute the proportionate size of the variance (i.e. variance/standard) and investigate all those exceeding, say, 10 per cent.

Both alternatives 1 and 2 must depend upon the manager's intuition or some arbitrary decision rule when it comes to deciding whether or not to investigate a given variance.

The advantages of options 1 and 2 above are their simplicity and ease of implementation, but both fail to deal adequately with the issues of significance (in statistical terms) and balancing the costs and benefits of investigation. We can resolve these issues with the help of the approach adopted in *statistical quality control*.

Statistical quality control (SQC) is based upon the established fact that the observed quality of an item is always subject to chance variability. Some variability in the observed quality of an item will be due to assignable causes that exist beyond the boundaries due to chance cause. (Assignable causes are, by definition, identifiable and steps can be taken to remove them.) The major task of SQC is to distinguish between assignable and chance causes of error in order that the assignable causes may be identified, their causes discovered and eliminated, and acceptable quality standards maintained.

These basic principles of SQC can be applied in areas other than production. An example of a control chart for monitoring advertising expenditure as a percentage of sales is given in Figure 18.18.

The standard of performance that is expected is that advertising expense will be 8 per cent of sales revenue, but random causes (i.e. chance) can make this figure vary from 6 to 10 per cent of sales revenue. If the range of 6–10 per cent represents three standard deviations on either side of a mean of 8 per cent (i.e. $\bar{x} = 8$, with confidence limits of $\pm 3\theta$), then observations would be expected to fall within this range in 998 out of 1000 cases.

However, when an observation falls outside these limits, two opposing hypotheses can be put forward to explain the situation:

- 1 The observation is the freak one out of 1000 that exceeds the control limits by pure chance, and the company still has the situation under control
- 2 The company has lost control over the situation due to some assignable cause, such as a new competitor entering the market.

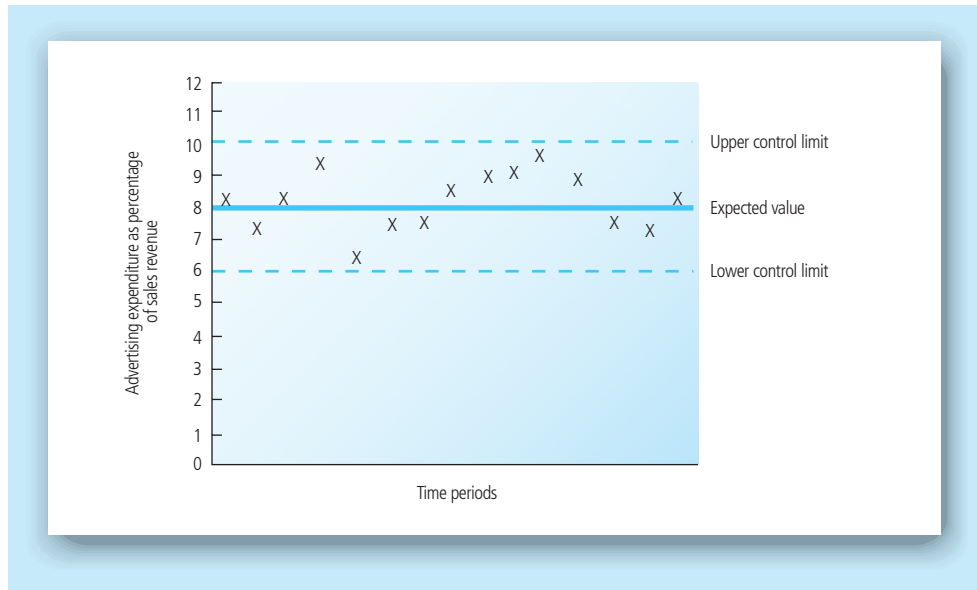


Figure 18.18 Advertising control chart

If hypothesis 1 is accepted, it is unnecessary to investigate – with the risk that something has actually happened to cause the situation to fall out of control. On the other hand, if hypothesis 2 is accepted and investigations are begun into assignable causes, there is always the risk – albeit very small – of the first hypothesis being correct and hence investigation being unnecessary.

Investigations to identify the causes of variances – even when the latter are deemed to be significant – involve costs, so we must again reflect on the cost-benefit issue: if the likely penalty from *not* identifying and correcting the cause of the variance is less than the likely cost of the investigation, it hardly seems worth the trouble.

Consider a hypothetical case in which the cost of investigating a reported variance is estimated at £200, while the penalty for not identifying a correctable cause is likely to be £600 (which could be the value of cost savings – or extra profit – that will arise once the cause of the variance is removed). If an investigation is undertaken and no cause is discovered, the enterprise will be £200 worse off, whereas it will be £400 better off (i.e. £600 – £200) if a cause is ascertained and corrected.

18.4 Taking corrective action

Having implemented plans, monitored performance and analysed significant variances, the next step is to decide on the corrective action that is needed. In this section we will concentrate on responding to environmental changes – especially those of a competitive nature.

How should an enterprise respond to environmental changes? There are many ways, and Barrett (1986) has pointed out two opposing possibilities. On the one hand, there is the *deterministic approach*, in which it is felt that the enterprise's environment

determines its actions, hence strategies and even its structure. This takes the idea of adaptation to environmental change to an extreme: changes in the environment – whether in the form of opportunities or threats – will result in changes in competitive strategy and the implementation of these changes may well bring about changes in organizational structure.

In contrast there is the *strategic approach*, in which the environment is seen as constraining the enterprise's freedom of action rather than determining it. This concentrates more on the enterprise's strengths (and weaknesses) and its ability to influence its environment rather than simply being influenced by it. One example is the strategy of raising barriers to entry, which modifies the environment against the interests of potential competitors.

Marketing intelligence has a role to play in both these approaches by identifying environmental change as a basis for reactive or proactive responses. The response process is reflected in the model portrayed in Figure 18.19.

Various response stages are highlighted, with any given one being triggered when the intelligence signals pass thresholds. Thus, for example, a strong signal indicating a significant change in the environment will cross a number of thresholds and activate an appropriate high-level response. Weaker signals will cross fewer thresholds and hence prompt lower-level responses. Barrett sets his model within a framework of power relationships – especially those involved in the allocation of resources via the budgeting process. This leads to the building in of 'slack' (i.e. a greater amount of resource than is strictly needed to carry out a given task) in certain parts of the enterprise in accordance with the distribution of power. Figure 18.20 indicates in some detail the links between stages in the response process and thresholds. The sequence of stages presumes that each subsequent stage consumes more slack resources than prior stages, thereby reducing the power given from the existence of slack resources.

How should an enterprise respond to environmental changes that manifest themselves either through the gathering of environmental data (e.g. by means of a competitor intelligence system (see Cvitkovic, 1989), or environmental scanning (see Sanderson and Luffman, 1988)) or via variance analysis? Help is available from the technique of *competitor profiling*. The steps in this technique, developed by SRI International, are:

- 1 Identify the industry's four key competitive strengths. Figure 18.21 shows one set of possibilities applicable to a manufacturing situation. It is implicitly assumed that both current and future success in the industry is a function of a competitor's ability to:
 - ➔ Meet customers' needs and communicate products' attributes
 - ➔ Understand and control relevant technology
 - ➔ Make superior products in a cost-effective way
 - ➔ Manage the coordination of human, financial and technological resources.
- 2 Select a single specific measure of success for each of the four key competitive strengths identified in step 1 above. See Figure 18.22 for some proposals: sales level, investment in R&D, capacity utilization and ROI are suggested for marketing, technology, manufacturing and management respectively.

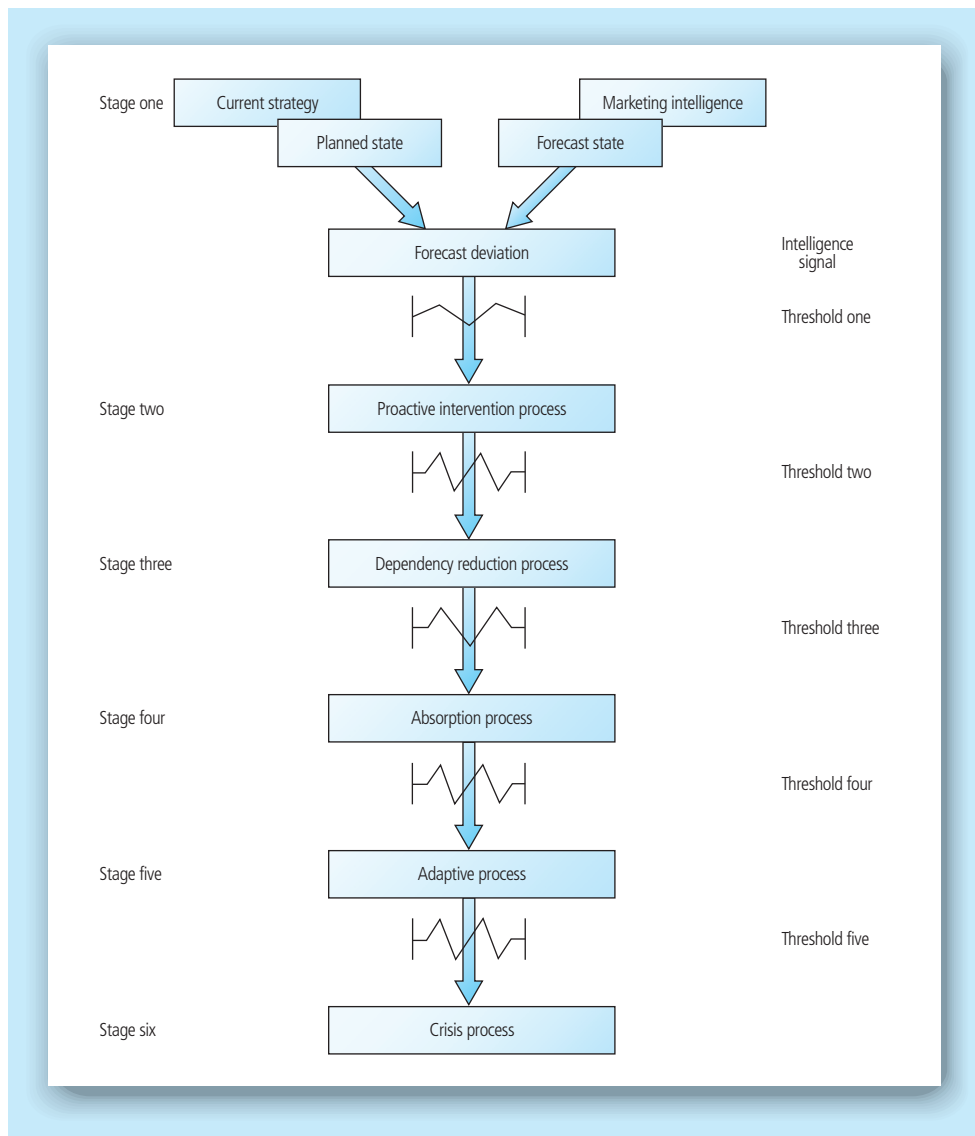


Figure 18.19 Response model (source: Barrett, 1986, p. 37)

- 3 Define linkages between adjacent pairs of competitive strengths to demonstrate their interdependence. In Figure 18.23, price has been used to link marketing and technology; quality to link technology and manufacturing; integration to link manufacturing and management; and growth to link management and marketing.
- 4 Determine average performance scores for the measures specified in step 2 and the linkages defined in step 3. This has the effect of setting up an 'average competitor' to use as a yardstick in assessing competitors' relative positions. In Figure 18.24, average performance for the industry is shown as a circle. Above-average performance for any competitor would be plotted outside the circle and below-average performance on any aspect would be plotted inside the circle. Scoring can be done by using a scale of 1 (= excellent) to 5 (= inadequate) to assess a competitor's standing on each

Stage one

The first stage of the model suggests that the organizational plan, or budget, is based on a forecasted state of the market environment. Market intelligence provides a constantly updated forecast of the environment in which the organization operates. Differences between the original planned state of the environment on which the organization is acting, and the revised forecasted state provided by the intelligence function, gives a 'forecast deviation'.

Stage two: the proactive intervention process

If the market intelligence report indicates that the budget allowance will be exceeded, the second stage of the model is entered. In this stage the market executives may be motivated to act to prevent the forecast deviation. This proactive intervention is an attempt to engineer the market into an acceptable state. In its simplest form it may merely necessitate a minor market push. This proactive intervention in the market will, however, consume at least some of the slack resources available to the marketing executive. Successful proactive intervention may, however, require resources in excess of the slack available. In this case the intelligence report will be used to support a plea for additional marketing resources, e.g. to undertake an unabridged campaign to protect a product's position against the anticipated attack of a competitor.

Stage three: the dependency reduction process

This process is an attempt by the organization to reduce its dependency on the market in question and so reduces the significance to the organization of the perceived market adversity. This decoupling may be achieved in a number of ways – diversification, the switching of resources, adapting plant previously devoted to the market to service other markets, and so on. Dependency reduction may, however, require a long lead time and for this reason organizations are likely to engage in diversification as a policy rather than awaiting detailed intelligence reports. However, market signals which cross threshold two are likely to spur this activity. The dependency reduction process, e.g. diversification, requires the use of slack resources.

Stage four: the absorption process

This process is an attempt by the organization to sit out the market change, or at least that proportion of the change which has not been dampened by proactive intervention or dependency reduction processes. Such an absorption process consumes the stock of slack resources available to the organization. 'Belt tightening' and 'shedding' indicate the extent of the rundown of slack. All members of the organizational coalition are likely to be affected if the absorption process continues for any extended period.

Stage five: the adaptive process

In the adaptive process the organization seeks to realign its strategy and/or structure to the perceived changed environment in which it operates. It engages the organization in a 'change mode' and requires the ability by the organizational executives to adapt or react to the forecast market change. Their ability to do so is dependent on the slack resources available and the ease with which such resources can be marshalled to implement strategy/structure changes.

Stage six: the crisis process

In this, the final process, the organization is dependent on a market which is changing. It has insufficient slack to absorb the change, and both proactive intervention and adaptive response are perceived to be ineffective. Such organizations now face the possibility of being 'selected out' by the market change. The perception that such is the case is likely to induce organizational crisis leading to trauma and the termination of the organization at least in the form in which it existed prior to the onset of the market change.

Threshold one

In setting market budgets, marketing executives may build in slack, most of which will usually be cut back in the budget setting process. It is possible that not all the slack will be removed and the marketing revenue budget will be artificially high. Unless market intelligence indicates that this budget allowance is likely to be exceeded no action will be taken on the basis of the market intelligence report. The market signal will not then cross the first threshold.

Threshold two

Should the power elite within the organization be unwilling or unable to make available sufficient resources to allow successfully proactive intervention, the second threshold is crossed and the third stage of the model is entered.

Threshold three

If the organization cannot, or chooses not to, utilize its slack resources in proactive market intervention, or in dependency reduction, the market signal indicating market change will pass over the third information threshold and the fourth stage of the model is entered.

Threshold four

For organizations which do not have sufficient slack to endure the forecast market change, the intelligence signal traverses the fourth threshold and stage five of the model is entered.

Threshold five

Should the organization be unable or unwilling to adapt to the change signalled by the market intelligence report and if the lower order processes cannot effectively be engaged, the intelligence signal will cross the fifth threshold and the sixth stage is entered.

Figure 18.20 Signal thresholds and response stages (source: Barrett, 1986, p. 38)

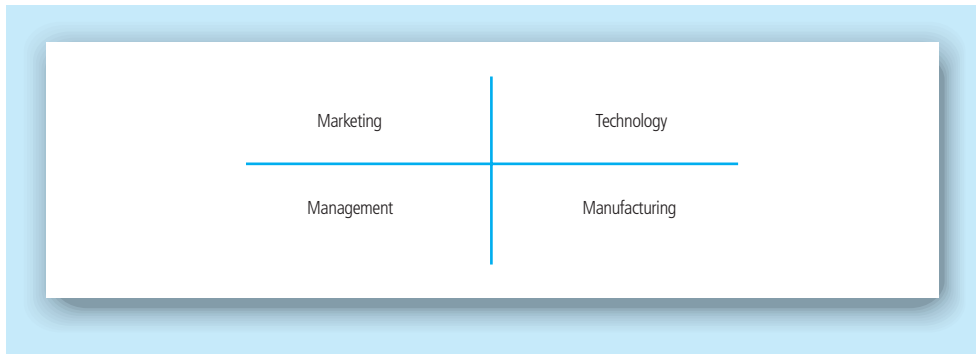


Figure 18.21 Key competitive strengths (source: Cvitkovic, 1989, p. 28)

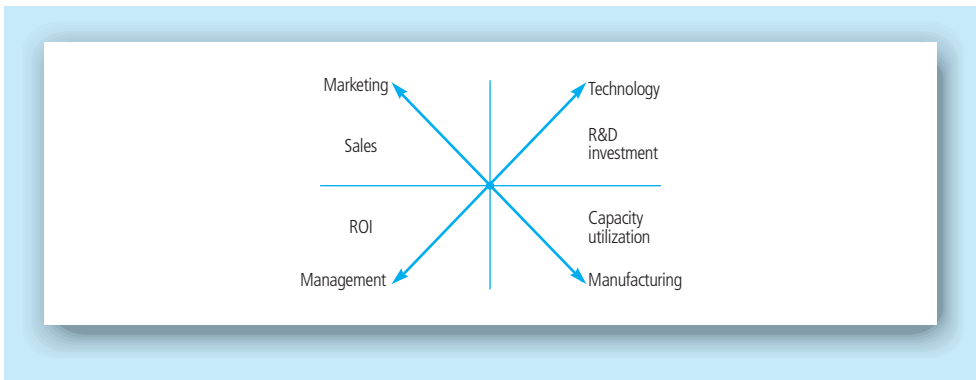


Figure 18.22 Measures of success (adapted from Cvitkovic, 1989, p. 28)

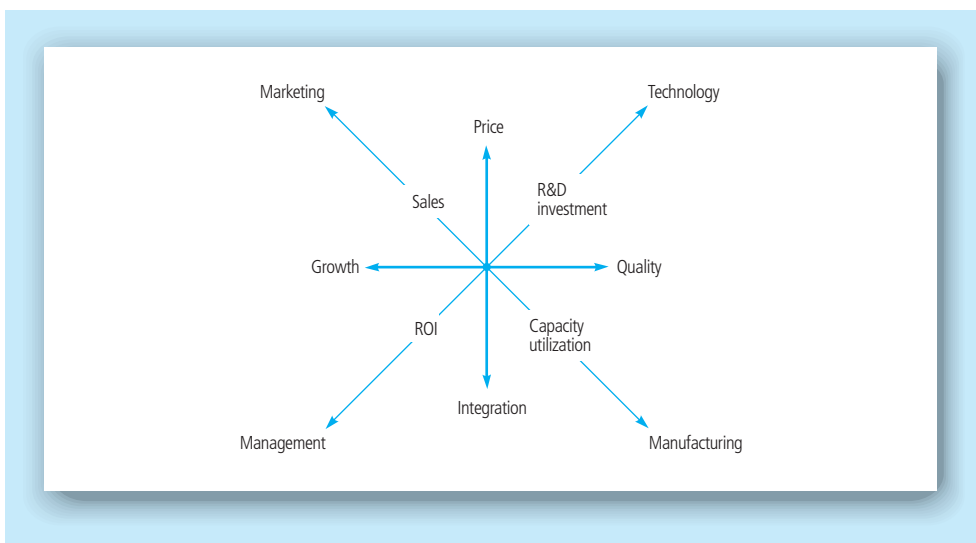


Figure 18.23 Linkages between competitive strengths (adapted from Cvitkovic, 1989, p. 29)

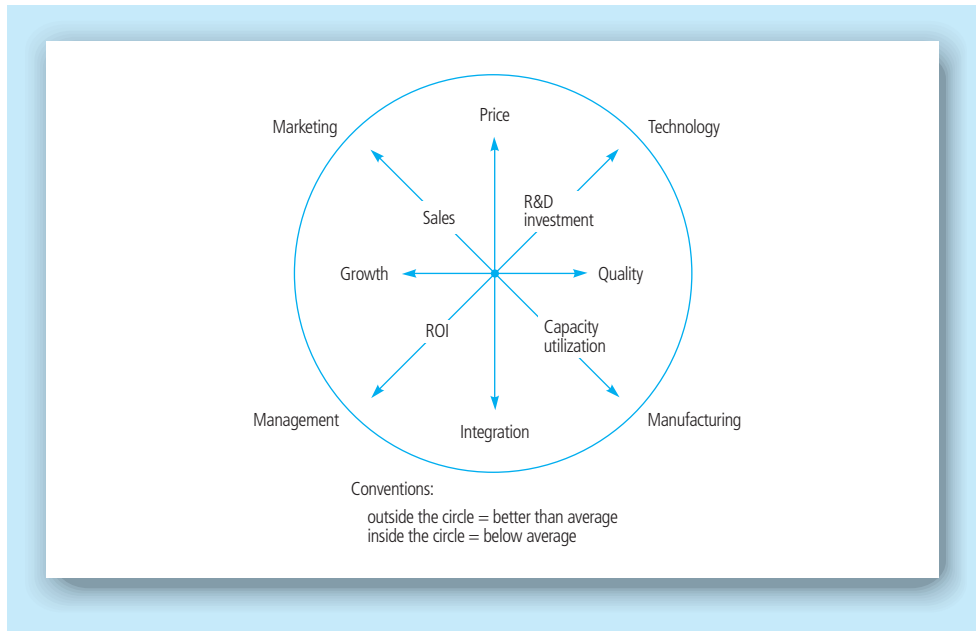


Figure 18.24 Average competitor (adapted from Cvitkovic, 1989, p. 29)

dimension shown in Figure 18.23 and then plotting these scores and joining them up (as shown in Figure 18.25).

- 5 Generate competitors' profiles in order to identify relative strengths and weaknesses as a basis for taking action. The strengths and weaknesses are shown (as in Figure 18.25) relative to the 'average competitor'.

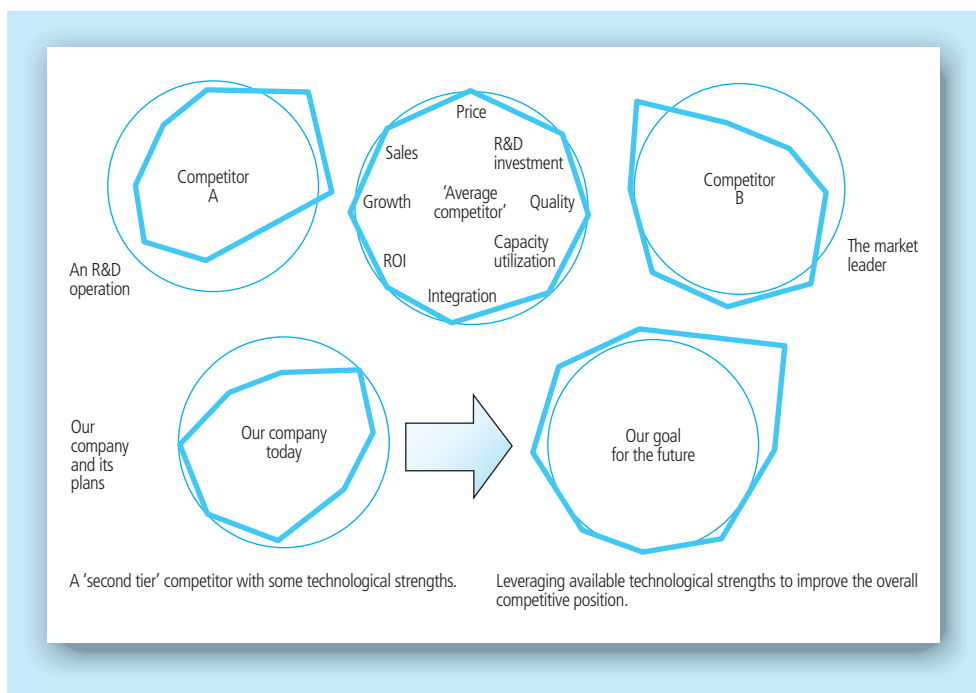


Figure 18.25 Competitive profiles (adapted from Cvitkovic, 1989, p. 30)

In monitoring competitors' activities, the categories of activity most relevant in relation to the strategic needs of the user must be determined. Once the categories are established, frequency of monitoring must be set. Prescott and Smith (1989) reported on a study they undertook in the USA to identify categories and frequencies. Details are given in Figure 18.26.

A further aspect of the study was the extent to which different categories of information were subjected to analysis (see Figure 18.27). Three levels of analysis were used in the questionnaire sent out by Prescott and Smith – extensive, basic and little/no analysis – with the extent to which implications were drawn from the analysis being limited to the first two levels.

Continuous	Periodic	Ad hoc
<ul style="list-style-type: none"> ➔ General industry trends ➔ Marketing and sales ➔ Financial ➔ Technological development 	<ul style="list-style-type: none"> ➔ Organizational goals and assumptions ➔ Customers ➔ Acquisition/divestment programmes ➔ Services provided ➔ Operations ➔ Channels of distribution 	<ul style="list-style-type: none"> ➔ Public and international affairs ➔ Human resources ➔ General administrative structure ➔ Supplier and procurement practices

Figure 18.26 Competitive information categories and their frequency of monitoring (adapted from Prescott and Smith, 1989, p. 10)

Extensive analysis undertaken and implications derived	Basic analysis with some implications	Little or no analysis and no implications
<ul style="list-style-type: none"> ➔ General industry trends ➔ Potential competitors ➔ Marketing and sales ➔ Financial ➔ Organizational goals and assumptions 	<ul style="list-style-type: none"> ➔ Technological developments ➔ Acquisition/divestment programmes ➔ Customers ➔ Services provided 	<ul style="list-style-type: none"> ➔ Distribution channels ➔ Human resources ➔ General administrative structure ➔ Public and international affairs ➔ Supplier practices

Figure 18.27 Extent of analysis of categories of information (adapted from Prescott and Smith, 1989, p. 11)

Competitor cost analysis methods have been proposed by a number of authors (e.g. Brock, 1984; Pyne, 1985; Beerel, 1986; Jones, 1988; and most notably Porter, 1980, 1985). Brock (1984, p. 226) has related his discussion to the *strategic triangle* (Ohmae, 1983). See Figure 18.28.

The focal points of the triangle were initially customers, competitors and the company in question, but Brock has emphasized the cost differences between one's own company and competitors as a potential source of competitive advantage. Cost differentials stem from the asset bases of competing companies coupled with the way in which assets are utilized. The importance of being cost-effective is evident when one considers the need to deliver value to customers at prices that are competitive while generating an adequate rate of reward to shareholders. As an example, let us take a comparison between an integrated steelmaker (Maxi) and a small competitor (Mini), with the latter using scrap steel and electric furnace technology. A detailed examination of annual reports, public statements of Mini's chief executive (who was a promoter of the mini-mill within the industry) and general trade literature gave sufficient information to allow the comparative profile shown in Figure 18.29 to be compiled.

It is evident that Mini's manufacturing costs are only 59 per cent of those relating to Maxi per ton of hot rolled steel ready for finishing. With a price set at £425 (as opposed to Maxi's £500), Mini not only has a clear price advantage of £75 per ton, but also a gross margin advantage of £175 versus £70, which will allow for even more aggressive pricing. Maxi can see from this type of analysis that its position is being eroded, and appropriate decisions need to be made to avoid a forced decline.

Without this type of information Maxi would not be able to see how the strong strategic position it has held hitherto is being undermined by Mini. Detailed guidance on carrying out this type of cost analysis can be found in Jones (1988).

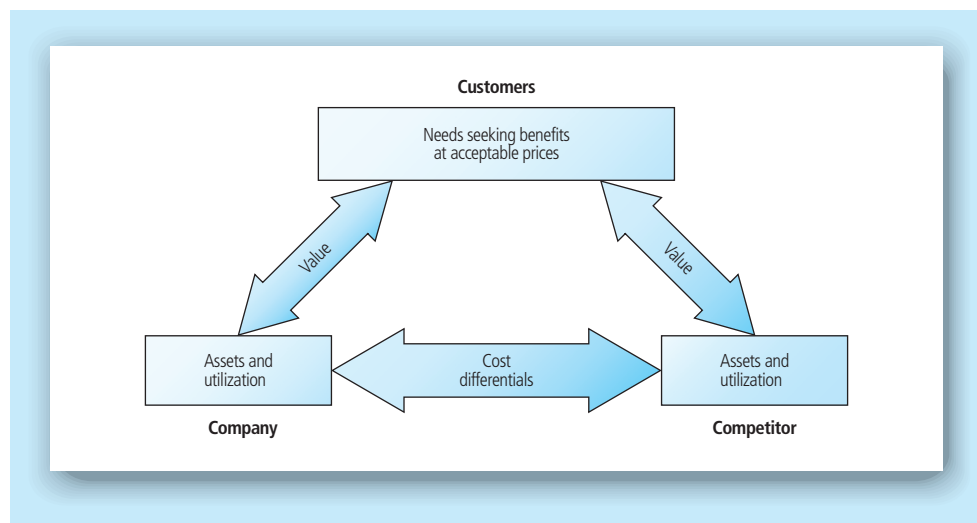


Figure 18.28 The strategic triangle (source: Brock, 1984, p. 226)

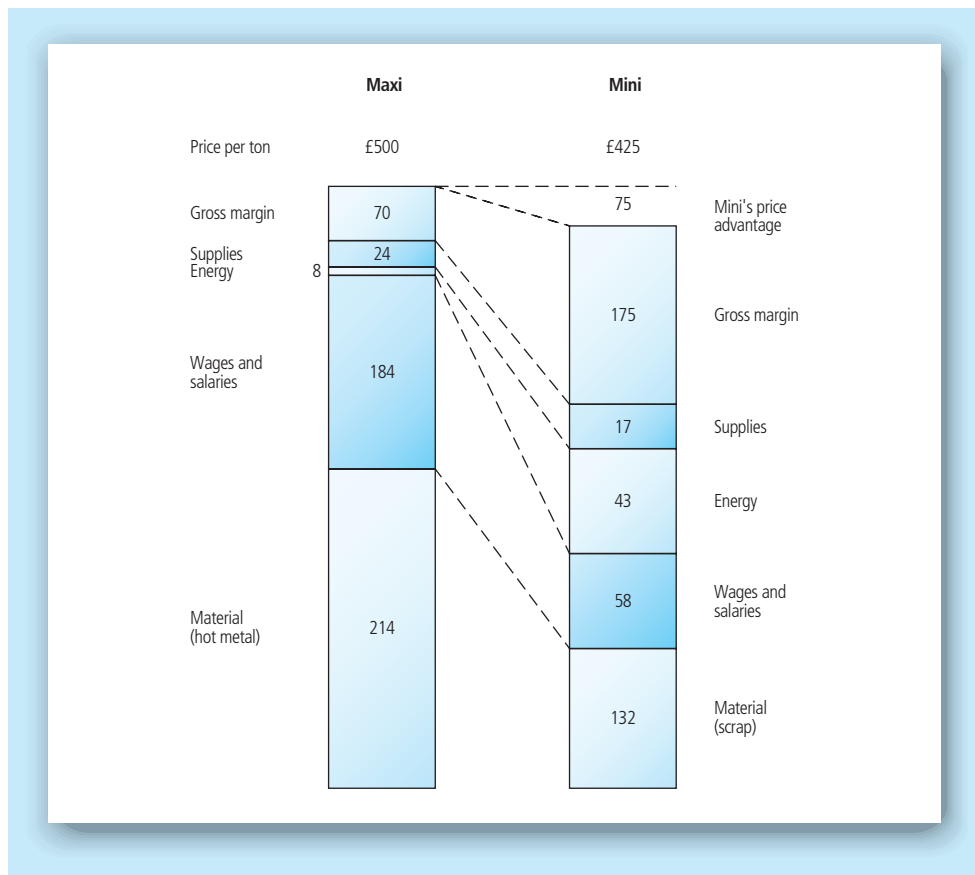


Figure 18.29 Cost advantages and disadvantages (adapted from Brock, 1984, p. 228)

Benchmarking

This is an analytical process through which an enterprise's performance can be compared with that of its competitors. It is used by organizations such as Xerox and Ford in order to:

- ➔ Identify key performance measures for each business function
- ➔ Measure one's own performance as well as that of competitors
- ➔ Identify areas of competitive advantage (and disadvantage) by comparing performance levels
- ➔ Design and implement plans to improve one's own performance on key issues relative to competitors.

Furey (1987) offers a number of US case studies showing benchmarking in use. One of these concerns a company (Company Y) that is a major vendor of telecommunications equipment in which the senior management was curious about the cost and productivity of its sales force. The comparisons shown in Figure 18.30 were developed through a benchmarking exercise using the largest direct competitor and the best-in-class vendor of data processing equipment.

	Company Y	Direct competitor	Best-in-class competitor
Cost benchmarks			
Average total sales rep. compensation	\$38,000	\$44,000	\$55,000
% compensation earned from commission	10%	15%	30%
Revenue per sales rep.	\$835,000	\$900,000	\$1,200,000
Compensation as % of revenue	4.6%	4.9%	4.6%
Performance benchmarks			
Average number of calls per week per rep.	16–18	13–16	20+
Revenue quotas	Yes	Yes	No
New account quotas	Informal	No	Yes

Figure 18.30 Sales force benchmarking (adapted from Furey, 1987)

The cost of sales representatives (as a percentage of revenues) was found to be very competitive in Company Y (at 4.6 per cent), but the low commission paid by the company relative to that paid by its main competitors was matched by low productivity (in terms of revenue generated). Moreover, the direct competitor's sales force was generating more revenue with fewer calls in the absence of new account quotas than was the case in Company Y. The best-in-class competitor was paying a high rate of commission to its sales force and aggressively pursuing new customers via numerous sales calls and quotas for new accounts.

Company Y's response to this situation was to restructure the sales team's compensation and split the team into two. By raising the rate of commission substantially, and by having one part of the sales force dealing with existing accounts and the other part dealing with new accounts, Company Y's relative market share improved within six months.

Benchmarking is applicable in other functional areas and has the potential, when properly communicated throughout the enterprise, to help change the corporate culture. In the case of benchmarking products or services offered by customers but not by itself, an enterprise's senior managers can gain insights to guide its decisions: by keeping abreast of new developments in this way, it will be easier to assess how to respond (see, for example, Schmid, 1987; Fifer, 1989).

In considering how to take corrective action, it is important to make some assessment of the probable response of competitors to any action that might be taken. This is a vital aspect of strategic behaviour. It is assumed that the identities of the enterprise's competitors – both actual and potential – are known, although this should not be taken for granted. Once the competitors' identities are known, they can be profiled (see Chapter 6) and possible responses can be explored, taking into account conjectures regarding the beliefs that competitors have of one's own enterprise (including its resources, capabilities and strategies).

Let us look further at this, drawing on the approach of Amit et al. (1988). In a simple situation involving an Enterprise X and its sole competitor, Y, there are four possible

price policies available. In Figure 18.31, these possibilities for X are shown as the headings for the rows; the column headings show competitor Y's likely reactions. The figures in the cells represent the changes in X's profits that are expected to result from the various interactive outcomes contained in the matrix. Thus, if X reduces its price by 10 per cent and Y responds by reducing its price by 20 per cent, then X's profits will fall by 25 per cent. If the data in the figure is valid, the optimal course of action for X will depend on the likelihood of Y responding in a particular way. For example, if it is felt to be most likely that Y will react to a price reduction on the part of X by reducing price by half as much as X, then the optimal choice for X is to reduce its price by 10 per cent, giving an increase in profits of 15 per cent. It will be apparent that additional information is needed on Y's likely reaction. This can be provided via *conjectural variations*, which are beliefs about competitors' views of one's own enterprise and of their likely reactions to actions taken by one's own enterprise.

In order to gauge a competitor's likely reactions, it is necessary to have information on:

- ➔ The structural characteristics of the industry and the technical ability plus desire of competitors to respond
- ➔ Competitors' conjecture about one's own behaviour.

Figure 18.32 illustrates a hypothetical situation involving different conjectural possibilities relating to a price reduction of 10 per cent. The derivation of conjectural variations is explored in detail elsewhere (see Amit et al., 1988), but we need to note here that it ranges from zero (when the competitor believes that the enterprise in question will not respond to changes in the competitor's strategy) to unity (when the competitor expects the enterprise in question to match any changes in strategy on the part of the competitor).

From Figure 18.32 it can be seen that when the competitor's conjectural variation is near to unity it believes the enterprise in question will respond aggressively to a shift in pricing policy. The obvious consequence of this will be a price war if the competitor were to match a reduction in price. As a result of this belief, the competitor is unlikely to match the price reduction for fear of the consequences. The opposing situation (i.e. when the conjectural variation is near zero) is likely to have the opposite result.

Enterprise X's price policy (% change in price)	Competitor Y's reaction (% change in price)			
	0%	-5%	-10%	-20%
0%	0	-10	-15	-20
-5%	+7	-5	-12	-22
-10%	+30	+15	-8	-25
-20%	+12	+8	+5	-30

Figure 18.31 Reaction function (adapted from Amit et al., 1988, p. 432)

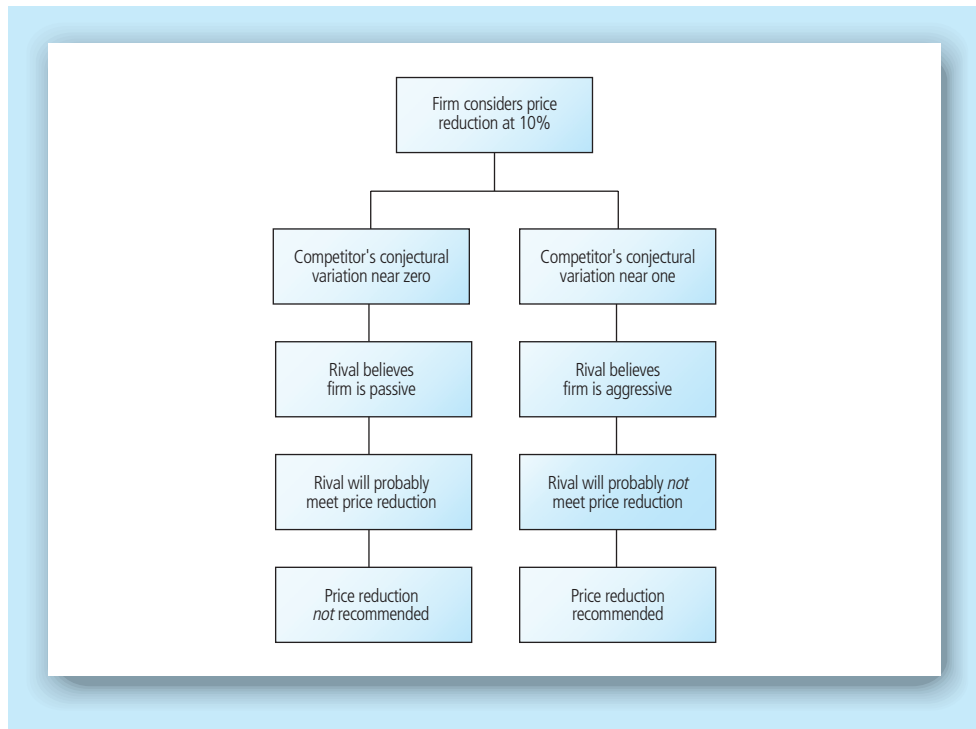


Figure 18.32 Conjectures and a price reduction policy (source: Amit et al., 1988, p. 433)

18.5 Management reports

An effective management reporting system is one that uses the available information flows to control the company's activities in accordance with objectives and plans. The process of controlling business operations depends in no small part on the devising, compiling and constant revising of an adequate and up-to-date system of reports. This should result in better decision-making, faster action, greater management flexibility and vastly improved coordination.

The controller must be aware of the types of decisions made at each managerial level, and the related information needs, if the best reports are to be compiled at the appropriate frequencies. In developing reports, the controller must assess their ultimate utility to their recipients, which requires that they be designed specifically for the individuals who are to receive them, with due consideration being given to the conditions that govern the business and the way in which it is managed. Reports should supply information that is considered important, and this should be arranged and analysed in such a way that it is most convenient and immediately useful to those who must make decisions on the basis of it. To achieve the aim of successfully communicating the essential facts about the business to those who manage it, controllers must have a clear idea of the purposes, possibilities and limitations of the many different types of statement and report. They must, therefore, understand the problems and viewpoints of those who receive their reports and ensure that these people understand the true meaning and limitations of the information contained in those reports.

Reports should be designed to emphasize those factors that are especially important in determining success: the critical success factors. Such factors have the following characteristics:

- 1 They are important in explaining success or failure
- 2 They are volatile (i.e. they can change quickly)
- 3 Prompt action is needed when a significant change occurs
- 4 Change is not easy to predict
- 5 They can be measured.

In specifying what is to be reported at each level of management, especially at lower levels, the controller must pose two questions:

- 1 What are the necessary and controllable factors relevant to the level of authority in question?
- 2 In what form are these factors best presented to aid in decision-making at this level?

The level of management in question will determine whether reports are to relate results to long-range objectives expressed in aggregate terms, or whether they should relate results to standard costs in great detail. The principles of control are the same for these extremes of top management and supervisory management, but the form of report is different.

The adoption of a structured approach to reporting, with results being reported by areas of responsibility, will enable top management to view the results and efficiencies of individual departments in the light of their contribution to overall performance and objectives. It may be, however, that the need for control action on the part of top management indicates a failure to achieve control at a more appropriate but lower level.

Similarly, a long delay between actual events and the reporting of these events via the top management control system may create the need for corrective action that is more drastic, more complex and involves more people than if such action had been initiated at a lower level of control more closely associated with the actual events.

Within the control framework the characteristics of good reports are that they should:

- ➔ Be oriented towards the users, taking into account both their level and their function
- ➔ Give as much information as possible in quantitative terms, and flow both ways in the organization (i.e. up and down)
- ➔ Be based on a flexible system that allows quick changes to meet new conditions
- ➔ Be oriented towards action rather than towards curiosity.

On a tangible plane succinctness is a great virtue in reporting, while on an intangible plane a major contribution made by an adequate reporting system is that the recipient of a report is made to pause and think over the contents of that report and its implications for the enterprise.

18.6 Summary

In this chapter we have built on the basic ideas of control and control systems that were introduced in Chapter 17, and looked in some detail at control methods that can be employed to advantage in a marketing context.

Audits are one such control method (discussed in detail in Chapter 2). This highlights the fact that there is not a watertight distinction between the use of marketing audits for *taking stock* (i.e. in addressing the question 'Where are we now?') and dealing with the *flow* issue of 'How might we ensure arrival?'

Budgeting, as the most widely used form of management control, with variants such as zero-base budgeting and output budgeting, was discussed, as was variance analysis, which is a diagnostic device to help explain why discrepancies between desired outcomes and actual outcomes have emerged. It was pointed out that the existence of a variance should not be taken as *prima facie* evidence that the budget level (or standard) is correct and the actual outcome is incorrect; it is often the case that the existence of a variance points to a poorly set budget target.

One straightforward refinement to a basic variance analysis approach enables a distinction to be made between *planning* variances on the one hand and *operating* variances on the other. The former are the primary responsibility of those engaged in making forecasts and setting targets, whereas the latter are the responsibility of those charged with implementing marketing plans. No matter how detailed the diagnosis of what went wrong and why, the crucial point is for this to be a prelude to action: diagnosis should be followed by prognosis. The chapter covered the importance of *responding* in a way that realigns strategic actions as a step towards achieving corporate missions.