Chapter 21

Preparing a budget

REAL WORLD CASE

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

Transport for London produced the budget shown below for Walking, Cycling and Accessibility. The budget description follows the table:

	2003/04 Total costs £m	*2004/05 Operating budget* £m	*2004/05 Capital budget* £m	*2004/05 Total budget* £m
Walking	7.1	0.9	6.7	7.6
Cycling	13.6	0.6	11.6	12.2
Accessibility	6.1		6.9	6.9

Walking
This activity consists of a programme of measures that aim to create and promote a connected, safe, convenient and attractive environment that increases the levels of walking in London in accordance with the Mayor's Transport Strategy objectives. Proposals have been developed in partnership with TfL, the London boroughs and interest groups (London Cycling Campaign & Living Streets).

Deliverables in 2004/05
- New and upgraded pedestrian crossings (21 crossings under development)
- Removal of footbridges and closures of subways and replacement with surface level facilities (four junctions under development)
- Provision of new or improved facilities at signalised junctions and footway upgrading existing strategic routes (numerous locations)
- Providing new footbridges across railways and upgrading existing facilities (four sites)
- Improved interchanges between bus and rail services (five sites)
- Pedestrian signing, security improvements, refuges, pavement widening at crossings, removal of clutter and installation of dropped kerbs (numerous locations)
- Co-ordination of the annual Car Free Day.

Indicators of success
- 90 pedestrian schemes to be delivered by March 2005.

Source: Transport for London website www.tfl.gov.uk/tfl/

Discussion points

1 How does this budget provide useful information for managing transport activity?

2 If you were a member of the Council being asked to approve this budget, what further information would you need?

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Learning outcomes

After reading this chapter you should be able to:

- Explain the purpose and nature of a budgetary system.
- Describe the administration of the budgetary process.
- Explain the benefits of budgeting.
- Understand the problems of budgeting.
- Explain how budgets are used in public service organisations.
- Prepare the separate budgets that lead to a master budget.
- Prepare budgets for periods shorter than 12 months.

21.1 Introduction

This chapter considers the purpose and nature of the budgetary system and explains the method of preparation of budgets, with particular emphasis on the planning process. No two businesses will have an identical approach to budget preparation. Some involve all employees in the process while others deliver the budget as handed down from senior management with little or no consultation. A practical example is explained in detail to show the preparation of a master budget. Calculations are also shown for quarterly budgets.

21.2 Purpose and nature of a budget system

The purpose of a budget system is to serve the needs of management in respect of the judgements and decisions it is required to make and to provide a basis for the management functions of planning and control, described in Chapter 16. That chapter also refers to the importance of communication and motivation as an aspect of management to which management accounting should contribute.

This chapter considers the purpose and nature of the budgetary process and explains the method of preparation of budgets, with particular emphasis on the planning process. The use of budgets for control is touched upon in this chapter but elaborated in more detail in Chapter 22. No two businesses will have an identical approach to budget preparation. Some involve all employees in the process, while others deliver the budget from senior management with little or no consultation. This chapter discusses systems where there is a relatively high degree of participation and negotiation in setting budgets. It should be recognised that in some businesses the senior managers will take decisions without such extensive consultation. A discussion of the relative merits of consultation are well beyond the scope of this book but in learning about the budgetary process it may help the student to think about the ways in which each person having responsibility for administering a budget might also have a part to play in its construction.

In Exhibit 21.2 (later) there is an illustration of the interrelationships of these management functions in respect of the process by which a business such as a chain of shops supplying motor cycles might go about planning to open a new shop in the suburbs of a city. Where this type of planning is taking place, management accounting assists through a budget system by providing quantification of each stage of the planning process. That example of the motor cycle shop illustrates a simple type of long-range planning situation but a more complex example would show the way in which the long-range planning leads on to successively more detailed developments, finishing with a collection of short-term operational budgets covering a period such as a year, six months or perhaps no more than one month ahead.

21.2.1 Long-range planning

In **long-range planning**, the senior managers of a business will begin by specifying a mission statement which sets out in the broadest terms their vision of the future direction of the organisation. Based on this mission statement the senior managers will then prepare a list of objectives which will specify the intended future growth and development of the business. For example, a company might state its mission and its long-range corporate objectives, for a five-year period ahead, in the terms shown in Exhibit 21.1.

Exhibit 21.1
Company's mission statement and long-range corporate objectives

Mission
The company intends to maintain its position as the market leader in the electrical repair industry, having regard to providing investors with an adequate rate of growth of their investment in the business.

Corporate objectives
- The company intends to increase the value of the investment by its shareholders at a minimum rate of 4% per annum, in real terms.
- The company intends to remain in the electrical goods repair business and to concentrate on this as the core business.
- The company will provide service in the customer's home and at its main repair centres.
- The company will continue to maintain its geographical focus on the high-earning suburban areas around the three largest cities.
- The company seeks to enlarge its market share in those geographical areas to 20% of the total market.
- The company has a profit objective of 30% gross profit on turnover.

The corporate objectives shown in Exhibit 21.1 relate to the business as a whole. They will then be taken down to another level of detail to create objectives for each division of the business. Within divisions, they will be translated into departmental objectives.

21.2.2 Strategy

Having a mission statement and corporate objectives is an essential first step, but the organisation must then decide exactly how it will achieve those objectives. The term **strategy** is used to describe the courses of action to be taken in achieving the objectives set.

Developing the strategy will involve senior management from the various functions such as marketing, customer service, production, personnel and finance. These functions are separate but must work together in the interests of the company as a whole. Each functional manager has to understand how the plans made by that function will affect other functions and the company as a whole. This requires communication and co-ordination with the assistance of a management accountant.

For the purposes of quantifying the strategy of the business, management accounting has developed specialist techniques under the global heading of **budgetary planning and control**. The rest of this chapter explains the processes involved.

21.2.3 Budgets

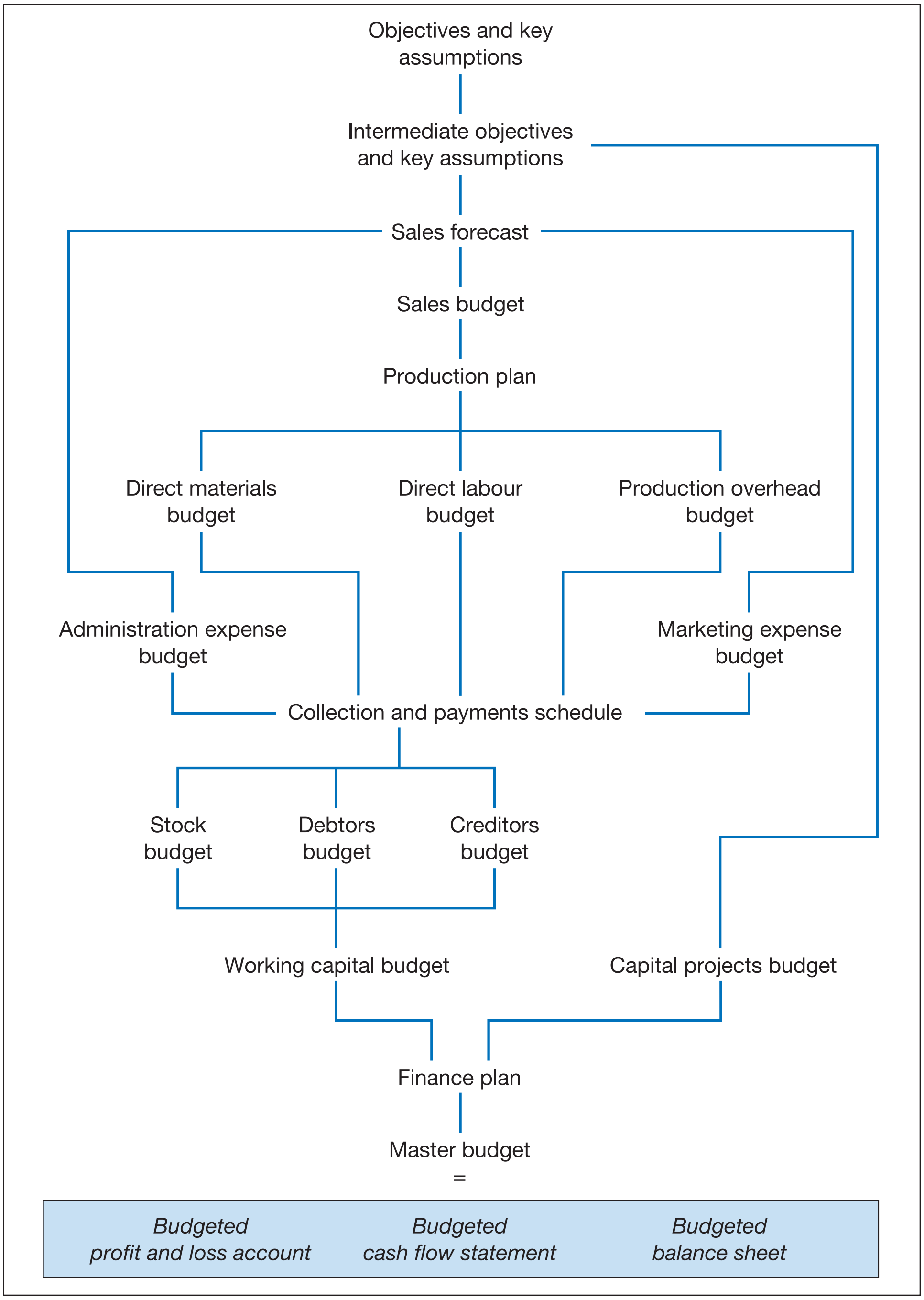
Definition

A **budget** is a detailed plan which sets out, in money terms, the plans for income and expenditure in respect of a future period of time. It is prepared in advance of that time period and is based on the agreed objectives for that period of time, together with the strategy planned to achieve those objectives.

Each separate function of the organisation will have its own budget. Exhibit 21.2 shows a typical scheme of budget structure within an organisation. It shows how the organisation moves from setting objectives, through the strategy stage and into the preparation of budgets. The long-term objectives are set first. It is important to note at that stage any key assumptions which might have a critical effect on future implementation of those objectives. The implementation of those long-term objectives is then formed into a strategy which results in some intermediate objectives for the short term. Again it is important to note any key assumptions which might later cause the organisation to question the objectives. In many businesses the critical factor determining all other budgets is the sales forecast. The business exists primarily to make sales and hence generate profit, so each separate function will be working towards that major target. Each function of the business then prepares its own budget as a statement of its operational plan for achieving the targets that have been set.

In practice these budgets would be prepared at the same time with a great deal of interaction among the managers of the various functions. That is difficult to show in a diagram. Exhibit 21.2 shows only the main budget relationships, moving from

Exhibit 21.2
Budget planning and relationships



the sales forecast to the **production plan** and the resulting **working capital** needs (stock, debtors and trade creditors) and capital investment in fixed assets. The various detailed budgets are brought together within a finance plan and then formed into conventional accounting statements such as budgeted profit and loss account, cash flow statement and balance sheet. This package is sometimes referred to as the **master budget**. The process leading to the preparation of the master budget, as outlined in Exhibit 21.2, will be used in the next section of this chapter as a basis for explaining the administration of the budgeting process.

Activity 21.1

Imagine you are the managing director of a large company about to embark on budget preparation for the following year. How would you manage the various people you would need to meet in order to make operational the budget relationships shown in Exhibit 21.2? Would you meet them all together or have separate meetings? Would you take sole charge or would you establish teams? Write down your thoughts on this before you read the next section and then check it against your ideas.

21.3 Administration of the budgetary process

The budgetary process has to be administered effectively in terms of initial planning, final approval and subsequent monitoring of implementation. A budget committee is usually formed to manage each stage of the budgetary process. The accounting staff will have a close involvement. The budget preparation procedures will need to be set out in a manual which is available to all participants. A continuing cycle evolves in which initial budgets are prepared, negotiations take place with line managers, the initial budgets are revised, the final budget is accepted and, later on, there is a review of actual and budgeted performance. The cycle then starts over again.

21.3.1 The budget committee

To implement the strategy decisions, a **budget committee** will be formed, comprising the senior managers who are responsible for designing the strategy. The budget committee receives the initial budgets from each functional manager. If the initial budget is based on unrealistic targets, then the functional manager will be asked to modify the budget within the organisation's overall targets. There is a motivational aspect of budget preparation, so it is important that the functional manager understands the need for revising the budget within the organisation's **strategy**. Budget negotiation can be quite a delicate process.

Fiona McTaggart describes her experiences of the initial budget formation in a conglomerate company having a stock exchange listing:

FIONA: *There are four divisions whose activities are quite dissimilar but the linking theme is their ability to generate cash for the group which, in turn, is translated into dividends for the shareholders and capital investment for the divisions. The budget committee is formed from the board of directors of the holding company. Budget negotiations start each year when each divisional manager sets targets in six critical areas: capital expenditure, turnover, gross and net profit margins, cash flow and working capital requirements.*

The budget committee knows over the years that the transport division manager is always too enthusiastic for capital expenditure and has to be persuaded to be more cautious in replacing and expanding the fleet.

The musical instrument division is on a steady-state pattern without much growth, but is regarded as a steady source of cash flow, so is not encouraged to be more ambitious.

The knitwear division has some problems associated with fashion goods and tends to be too conservative in its planning. A measure of risk taking is encouraged and almost every year that division has to be asked to revise its initial turnover targets upwards.

The fourth division is stationery supplies and their problem is profit targets in a competitive sector. Little can be done about gross profit, but there is plenty of scope for cost efficiencies to improve the contribution of net profit to cash flow.

21.3.2 The accounting department

The staff of the accounting department do not initiate the preparation of budgets but will be assisting in the practical aspects of budget preparation. They should have the knowledge and experience to provide advice to line managers on the preparation of budgets. The accounting department will have the computer facilities to prepare and co-ordinate the budget preparation process.

21.3.3 Sequence of the budgetary process

Exhibit 21.2 shows the relationships among the various budgets but does not portray the time sequence of the budgeting process. The principal stages of this sequence are:

1. communicate the details of objectives and strategy to those responsible for preparation of budgets;
2. communicate the details of budget preparation procedures to those responsible for preparation of budgets;
3. determine the limiting factor which restricts overall budget flexibility and forms the focus of the budget cascade;
4. prepare an initial set of budgets;
5. negotiate budgets with line managers;
6. co-ordinate and review budgets;
7. accept budgets in final form;
8. carry out ongoing review of budgets as they are implemented.

Communicate objectives and strategy

The long-range plan should be contained in a **strategy** document which is circulated within the organisation at intervals throughout the year. Regular circulation, with invitations to comment and a visible process of revision to accommodate changing circumstances, means that those responsible for the preparation of budgets have the fullest understanding of the basis for the budget process. The strategy document should contain clear narrative descriptions of the objectives of the organisation, supplemented by quantified illustrations of the impact on the organisation as a whole and on major divisions. The objectives may initially be expressed in non-financial terms such as production or sales targets by volume, or workforce targets by quantity and quality. Ultimately, all these non-financial targets will have a financial implication.

Communicate procedures

For communication of budget preparation procedures within the organisation there must be a **budget manual**. This will set out the timetable for budget preparation, formats to be used, circulation lists for drafts, and arbitration procedures where conflicts begin to show themselves.

Determine the limiting factor

For many organisations, sales are the limiting factor. There is no point in producing goods and services which do not sell. There may be occasions when the demand is not a problem but the supply of materials or labour resources is restricted. (Such restrictions on production factors should be temporary in a competitive market because materials will eventually be found at a higher price, while labour will move from one geographical area to another or will train to develop new skills within the area.) Whatever the limiting factor, it must determine the starting point of the budgeting process. For this chapter it will be assumed that sales are the limiting factor. That assumption is the basis of the chart of budget relationships shown in Exhibit 21.2 where the cascade flows down from the top to the foot of the page.

Preparing an initial set of budgets

The **sales budget** is a representation of the volume of sales planned for the budget period, multiplied by the expected selling price of each item. For most organisations, sales volume is the major unknown item because it depends on customers whose choices may be difficult to predict. In practice an organisation will carry out some form of market research, ranging from very sophisticated market research surveys to some simple but effective techniques such as contacting past customers and asking them about their intentions for the period ahead. Sales representatives will, as part of their work, form continuous estimates of demand in their region of responsibility. Past performance in sales may usefully be analysed to identify trends which may be an indicator of future success in sales.

From the sales plan flow the **operational budgets**. Exhibit 21.2 shows the subsequent pattern of budget development once the sales budget has been determined. The **production plan**, setting out quantities of resource inputs required, leads into operational budgets for direct labour, direct materials and manufacturing overhead which combine resource quantities with expected price per unit. At the same time budgets for administration and marketing are being prepared based on quantities and prices of resources needed for production and sales.

That information provides the basis for a profit and loss account matching sales and expenses. A cash flow estimate is also required based upon working capital needs and fixed asset needs. **Working capital** depends on the mix of stock, debtors and creditors planned to support the sales and production levels expected. Fixed asset needs derive from the capital projects budgeted as a result of the objectives of the organisation.

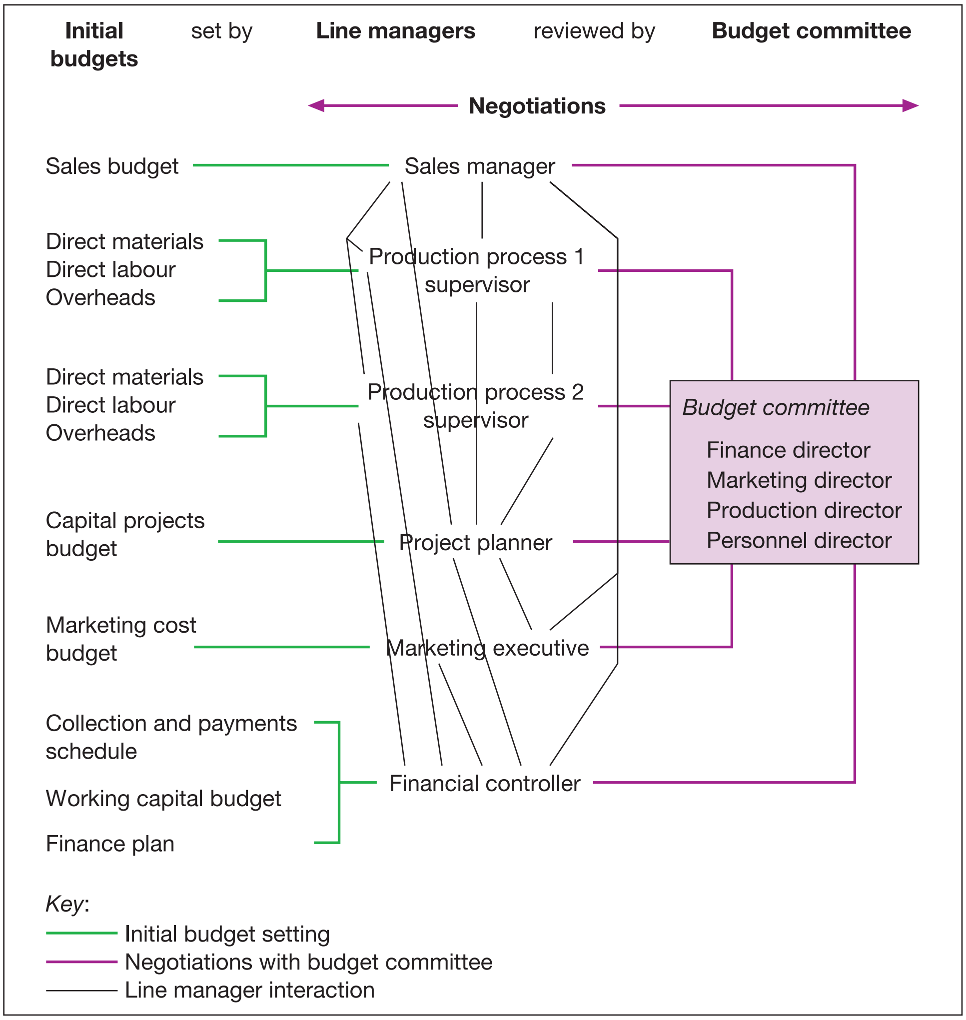
This all feeds into a finance plan from which the **master budget** emerges containing the budgeted profit and loss account, the budgeted cash flow statement and the budgeted balance sheet.

Negotiate budgets with line managers

The success of the budgetary process is widely held to depend on the extent to which all participants are involved in the budget preparation process. The budgets will be initiated in each of the departments or areas responsible but each budget may have an impact on other line managers. There may be a problem of restricted resources which requires all budgets to be cut back from initial expectations. There may be a programme of expansion which has not been taken sufficiently into account by those preparing the budgets. Whatever the particular circumstances, a negotiation stage will be required which will usually involve the budget committee in discussions with various line managers. At the very least this will be a communications exercise so that each participant understands the overall position. More often it will be an opportunity for fine-tuning the plans so that the benefit to the organisation as a whole is maximised.

Although Exhibit 21.2 is presented as a downward-flowing cascade because of the increasing level of detail involved, it does not adequately represent the negotiation processes involved. Exhibit 21.3 is a different way of showing the budgetary process outlined in Exhibit 21.2. It emphasises people rather than the documentation resulting from the process, and also shows the combination of what is sometimes described as the 'bottom-up' preparation of budgets with the 'top-down' approval by

Exhibit 21.3
The negotiating aspects of budget planning



senior management. In Exhibit 21.3, the black and pink lines show some of the interactions which might take place in the negotiation stage, distinguishing negotiations among the line managers (black lines) and negotiations between the line managers and the budget committee (pink lines). Quite deliberately, the lines are shown without directional arrows because the negotiation process is two-way. Even then a two-dimensional diagram cannot do justice to the time span and the sequence of negotiations over a relatively short space of time.

Co-ordinate and review budgets

Participants in each separate negotiation will reach a point where they are satisfied with the discussion, or else they understand where and why their opinions differ. However, the budget committee has an obligation to serve the interests of the organisation as a whole. The separate budgets resulting from the negotiation process are brought together in a meeting of the budget committee. At this meeting the separate budgets are co-ordinated. If the sales manager has budgeted for a 10% expansion in the volume of sales in the coming year, while the production director has budgeted for steady-state levels of production, then this co-ordination exercise will show a potential reduction in stock levels. This may be acceptable in the circumstances, but the risks of inadequate stock levels must be added to the planning considerations. If the production director has budgeted for a change in employee grade which will increase the wages cost but the finance director has planned for a 'freeze' on payroll costs, the co-ordination exercise may result in one or the other budget giving way.

Co-ordination will involve examining all the separate budgets in terms of how well they serve the objectives and strategy defined at the outset. Review could take a variety of forms. The budget committee might review the budgets for reasonableness by comparing them with the budgets for the previous year and the outcome of that year. The review might concentrate on the effective use of cash. It might link the budget requests to indicators of performance. For example, there might be a view that departments that have performed well should receive even greater budgets to support this high performance. On the other hand, there might be a view that a department that has failed to perform to expectations needs greater budgets to support a catching-up exercise. Co-ordination and review may lead to a further round of negotiation in order to arrive at the best position for the entity as a whole.

Accept the budgets in final form

At the end of the negotiation period it will be necessary for the budget committee to approve and accept a definitive set of budgets which will set out the organisation's plan for the period ahead. It is possible that, as a result of the negotiation stage, some managers will feel more satisfied than others. A good system of budget setting will by this stage have ensured that all managers, whether disappointed or not, understand the reasoning and understand what is expected in their area of responsibility.

Ongoing review

The budget process is not an end in itself. It is a formal process of planning which guides subsequent action. Monitoring that subsequent action against the budget plan is therefore an essential follow-up to the budget process. An organisation might decide that monthly monitoring of progress against budget is adequate for control purposes and for contributing to future planning.

Within the control function, monthly monitoring of the actual outcome against the budget will allow corrective action to be taken at the earliest opportunity, although care is required in this respect. It could be that conditions have changed since the budget was set and the actual outcome is a better representation than the budget. In such a case it might even be appropriate to revise the budget in line with the changed conditions.

Budgeting is a continuous process which requires adaptation of existing budgets where a need for change is indicated, and the consideration of performance against past budgets when the next round of budget preparation begins. The budget committee is therefore active the whole year around.

Activity 21.2

Write down five ways in which budgets appear to benefit an organisation. Then read the next section. How does your list compare with the text? Have you identified benefits additional to those described? Have you used different words to describe a benefit which is in the text?

21.4 The benefits of budgeting

The budgetary process contributes to effective management in the following areas: planning, control, communication and co-ordination, and performance evaluation. Each of these areas is now considered in turn.

21.4.1 Planning

The preparation of budgets forces management to carry out a formal planning exercise which identifies every part of the organisation and brings the separate parts together on a quantified basis. Major planning decisions are made as part of the long-term planning process, and these are then refined into progressively greater detail as management turn them into short-term operational plans. A formal planning process encourages all parts of the organisation to contribute on a regular basis to the formation of the overall plan and to identify potential difficulties at an early stage. Here is Fiona McTaggart to describe the budget planning process in a major multinational company.

FIONA: *I once participated in the planning process within a major international oil company. The financial year ran from January to December. The company's head office was in Brussels, with operational centres around the world. I was working in one of the UK operational centres, seeing the process from part-way along the chain. A company strategy group, comprising the senior management from head office and the operational centres, would form a rolling five-year statement of objectives. Having a rolling plan means that the company always looks to the next five years, but each January the rolling plan is reviewed, the current year is deleted and the fifth year ahead is added.*

The effect is that the rolling five-year plan is updated every January in respect of the five-year period starting the following January. That means the company has 12 months in which to prepare its operational budgets for the one year starting in the following January. Preparation of the five-year plan is described as Stage A. Each operational centre around the world then has two months to come back to head office with the results of its one-year budgeting, described as Stage B.

Stage B involves each operational centre specifying how the implementation of the five-year plan will be carried out for one year ahead within the operational centre, bringing out a master budget of quarterly cash flows and profit. At that stage they don't produce the detailed operational budgets within the operational centre, but each centre will have consulted with its various managers as to the way in which their departmental objectives for one year ahead will mesh with the five-year plan from head office and from the operational centre.

Stage C lasts one month and allows some fine-tuning of the five-year plan, by the head office, in the light of the reaction from the operational centres. That takes matters up to the end of June, and after that point there is little further opportunity for change in the five-year plan, or in the one-year targets of each operational centre, short of a major change in circumstances in the company or in the industry.

Stage D lasts four months and involves detailed budget planning within each operational centre. That will be an iterative process, where each manager of an operational unit produces a draft budget covering a 12-month period, the draft budgets are collected together, an overall view is taken and the draft budgets go back to the managers for revision.

Everything is tidied up by the end of October and then there are two months left to put the documentation together so that budgets are ready for implementation from the start of the next year in January.

Meanwhile, the senior managers in Brussels will have started, in October, their deliberations with a view to revising the rolling five-year plan in the following January. Then the whole process starts over again!

21.4.2 Control

Once the budget is in place, implementation of the organisation's plans takes place and the actual outcome may be compared against the budget. Some revenues and costs will behave according to expectations, but some will not. Attention needs to be given to the items which are not meeting expectations. Having a budget as a basis for comparison allows management to identify the exceptions which require attention.

Identifying such matters at an early stage allows corrective action to be taken to remedy the problem.

Differences between the actual outcomes and budget expectations may signal the need for urgent action by the managers or the need for revisions to the budget. If the budget differences arise from factors under the control of the line managers, then urgent action may be required to rectify the causes of those differences. However, if the budget differences are the result of unforeseen or uncontrollable factors, then the need is for modification of the budget.

Here is Fiona to continue her story.

FIONA: *I've told you how the oil company produces its budgets for the year ahead. From January of each year the actual out-turn of the operations has to be compared against the budget. That is where the problems really start, because the oil industry is at the high end of the uncertainty spectrum. The price of oil is controlled in world markets and influenced by world events well beyond the power of any company. A threat of war in some far-away country which borders on the main shipping lanes will send the price of oil up but threaten supplies for individual production companies seeking to take advantage of the price rise. Recession in developed countries will lower the demand and hence lower the price, so that companies have oil in the ground but may as well leave it there if demand has disappeared. These major changes occur on a short-term basis and may cause the short-term plans to require urgent change.*

It would not be feasible to return to the five-year plan every month because of a crisis, so the operational centres have to adapt to change. A few years ago, the operational centres did nothing to amend the budgets after they had been finalised. The consequence was that the budgets grew increasingly irrelevant to reality as the year progressed. As a result, the operational managers largely ignored the budgets and set their own unofficial targets in operational terms without having regard to the precise financial implications.

Senior management realised that this by-passing of the management accounting budgets was linked to a lack of awareness of cost control, vital to a business which has little control over its selling prices. So a quarterly revision process was devised whereby the operational centre is allowed to revise the budgets to keep them relevant to changing circumstances. This may lead to a deviation from the five-year plan set at the start of the year, but the view is that the increased relevance to operational practice is more important than the deviation from the plan. Of course, information about the revision is fed back to head office as input to the next round of five-year planning.

It seems to be working, and the managers at the operational level, such as platform supervisors and supply service managers, now use their quarterly budgets as a basis for explaining how they control costs for which they are responsible. There is also a benefit to the five-year planning exercise because indications of change are fed in during the year and the long-term exercise itself is becoming smoother.

21.4.3 Communication and co-ordination

In Chapter 16 there is an organisation chart (Exhibit 16.1) which shows line relationships and horizontal relationships where effective communications are essential. Lines of communication ensure that all parts of the organisation are kept fully informed of the plans and of the policies and constraints within which those plans are formed.

Fiona continues with her experiences in an oil company.

FIONA: *One of the major problems of any large organisation is to encourage communication and co-ordination within the separate parts of the entity. The oil company is organised into divisions based on the six different exploration fields. Sometimes those different fields appear to regard themselves as self-contained units with no other relationships. It is important to overcome this insularity by skilful use of communication and co-ordination. The process* *of communication and co-ordination starts with the early stages of the budget planning process when each divisional head is required to review the plans for the division in the context of the other five divisions. Targets set within the budget are comparable across the divisions, but there is an allowance for the relative exploration difficulty. That first stage of review may encourage a self-centred attitude of protecting the division's interests, but it does at least encourage a wider awareness of global targets.*

The communication process continues when detailed budget plans are prepared. Divisional heads attend monthly meetings when the budget planning team sets out the main features of the budgets. That allows one-to-one communication and creates an awareness of the possibilities of mutual savings by co-ordination. As one small example, a helicopter might be leaving the airport to take supplies out to a rig. The return trip could usefully be turned into a full payload by calling at a rig on a nearby field on the way back. That requires some co-ordination but could halve the overall flight cost for each field.

The control stage encourages further awareness of the need for co-ordination when the actual costs are compared with the budget. Each divisional head receives an exception report showing costs which are running over budget, and there is a system of marking cost headings where co-ordination could reduce overall costs. A commentary section attached to the exception report gives the divisional head guidance as to where co-ordination might usefully be applied.

21.4.4 Basis for performance evaluation

Performance evaluation within organisations must sooner or later be taken to the stage of detail which requires evaluation of the performance of individuals working within the organisation. In some situations there will be a monetary reward for high performance standards, in terms of bonus payments and possibly promotion. There may be penalties for underperforming, the most drastic of which is to be dismissed from the post. Apart from the organisation's needs to evaluate the performance of those working within the organisation, there is also an individual's need for self-assessment. Whatever the type of performance evaluation of the individual or group of individuals, targets must be set in advance which are known to, and understood by, all participants. The budgetary process forms a systematic basis for setting performance targets in financial terms.

The financial targets may then have to be translated into non-financial targets (such as number of items produced per week, or frequency of corrective work, or number of administrative tasks undertaken) because the person concerned will identify more readily with the non-financial performance measure. The subject of non-financial performance measures is explored further in Chapter 23.

Activity 21.3

Write down five ways in which budgeting may cause problems for an organisation. Then read the next section and compare your list with the text. Have you found additional problems? Are the problems you have identified more serious or less serious than those described in the text?

21.5 Behavioural aspects of budgeting

So far this chapter has presented what is largely conventional wisdom as to the desirability of, and a systematic approach to, the setting of budgets. In real life, things are not always so simple. You now move on to look at two potential problems, namely the behavioural aspects of budgeting and the limitations of line item budgets.

The earlier description of the technical process of setting a budget emphasised the need for involvement at all stages of the process. In an ideal world that would produce the best solution, but the world is not ideal and not everyone can be allowed to do exactly as he or she would wish at the first instance. So potential conflicts arise and those involved in the budgetary process need to be aware of the behavioural aspects in order to maximise the good points and minimise the problems.

The behavioural aspects may conveniently be summarised as relating to motivation, participation, feedback, group effects, budget slack and the politics of the organisation. In each of these areas there has been research into the effects, sometimes with inconclusive results. This chapter does not seek to give detailed reference to the research work, but rather to bring out some of the findings as points to consider in relation to the technical process.

21.5.1 Motivation

It was suggested earlier in this chapter that budgets should help in performance evaluation because they provide formal targets against which to measure performance. If the targets are set with care, there should be motivation for the individual to achieve those targets. The question then arises as to what type of targets should be set. Relatively easy targets will be achieved by all, but they will know the targets were easy and will not feel fully motivated by that level of evaluation of performance. If the targets are moderately difficult there will be a stronger motivation for some individuals to achieve those targets, with a sense of personal satisfaction in doing so. Others will fail and will become despondent. They may decide not to put any further effort in because the targets are too difficult.

The literature on goal setting suggests that it is important that the budget targets are accepted by the individuals involved. In that context, budget targets should be at the ‘difficult’ end of the range, by way of creating a challenge, but should be seen as being attainable. If budget targets are unrealistic there may be a negative reaction where the individual does not even attempt a reasonable level of performance. Communication between levels in the organisation is also important, so that the individual knows that achievement of targets is reported at a higher level and recognised in some form. Within all these considerations of positive factors of motivation, there may be personality problems which invalidate approaches which would otherwise be successful.

21.5.2 Participation

A full understanding of the behavioural aspects of the budgetary process requires an understanding of psychology. Research into behavioural aspects of budgeting has therefore included psychological studies of the individuals participating in the budgetary process. It is argued that individuals have needs for a sense of belonging, a sense of self-esteem and a sense of personal fulfilment. These needs do not necessarily have to be provided through remunerated employment or self-employment. They could be achieved through charitable work or dedication to a particular way of life. To the extent that people do spend a considerable part of their lives in paid employment, these needs may most readily be satisfied by that work.

Participation is one way of meeting those needs, and therefore participation in the budgetary process is a significant aspect of meeting human needs. Those individuals who participate in the budgetary process will gain a sense of ownership of the process, or belonging to the process. They will experience an increase in self-esteem through having a defined role in the process and will achieve a sense of personal fulfilment through successful implementation of the budget plans.

21.5.3 Feedback

Feedback on actual performance, as compared with the budget, is an essential part of the control process which follows from the setting of the budgets. Feedback is only effective if it is provided in a short time-frame. Good news is preferred to bad news; individuals may thus concentrate on the positive feedback and hope that the negative feedback will disappear. The information on negative feedback may have to be presented in a constructive manner if it is to result in action. For example, 'Sales this month were 10% down' may be seen as a negative aspect about which little can be done after the event, but a statement such as 'Next month's sales effort must take account of the cause of last month's 10% decrease' requires positive action in identifying and seeking to remedy the cause of the decrease.

Feedback must relate closely to the responsibility level of the individual if it is to encourage remedial action. There may be a personality problem here, as elsewhere, if individuals see the feedback as criticism of their work. That adverse reaction to criticism could be a function of age or insecurity. Negative aspects of feedback may need a different form of communication from that needed for positive aspects.

21.5.4 Group effects

The impact of the budgetary process on a group of persons may be quite different from the impact on the individual within the group. Participation by individuals will lead to greater group interaction, which will be a good thing if the individuals value their membership of the group and see the goals of the group as being collective targets that they all regard as desirable. Such a group will show cohesion, which will be increased by participation in the budget process.

Where a group does not have such cohesion, or the majority pressure is towards lower targets, the performance of the individual may be reduced by participation within the group. It may therefore be important for senior management, wishing to make effective use of the budgetary process, to have careful regard for the composition of groups within the organisation.

21.5.5 Budget slack

Where budgets are used to measure performance, the managers who set those budgets may be tempted to build in some element of spare resources that allows a lapse from actual high levels of performance without deviating from budget targets. The element of spare resources could involve overestimating the time required for any particular task, or using the highest price of input materials available in the price list, or asking for more equipment than is strictly necessary. Quite apart from such deliberate creation of slack there could also be unintentional errors such as planning activity for 52 weeks in the year when the premises are only open for 50 weeks.

The use of such bias at a lower level of budget preparation may be countered by a correspondingly strict attitude at a higher level to compensate for the built-in slack. That could be unfortunate for the lower-level manager who does not build in slack but is penalised along with the rest. The answer to this problem is that the process of budget setting should be specific as to input information so that built-in slack is identified at the earliest possible stage. Flexibility in budgeting is also important to ensure that where slack does become evident it is dealt with by budget revision.

21.5.6 Politics of the organisation

Irrespective of the type of entity, it is almost inevitable that there will be a political aspect to its management structure. The word 'politics' here refers to the power struggle within the organisation. It might be a power struggle in which labour unions seek to impose their will on management. It might be a power struggle within the board of directors or between divisions of the enterprise. Whatever its nature, such a power struggle is evidenced in the budget process where various units of the enterprise are engaged in rivalry over the formulation of the budget. Thus the budgetary process may be more important as a manifestation of the political struggle than as an item of financial planning.

There may be two aspects to budgeting: the public image of resource allocation, and the private image of resolving conflict. For the purposes of this book we will concentrate on the technicalities of providing information for resource allocation, but the other potential aspects should not be ignored entirely. They form a significant element of more advanced study in management accounting.

21.6 Approaches to budgeting

This section contrasts input-based and output-based budget systems.

21.6.1 Input-based budget systems

The budgetary process described in this chapter has focused on the separate items which contribute to the overall budget. There will be a line for each item, such as direct materials, direct labour, various kinds of production overhead, various kinds of administration and selling and distribution costs. That type of budget is called a **line item budget**. The line item budget concentrates on the inputs to the process.

As an example, in the National Health Service the hospital services and support facilities are provided by NHS Trusts, each covering a geographical area. The Trusts must plan their budgets with regard for the objectives set by the government. As an example, Exhibit 21.4 sets out the financial objectives for one Trust.

Exhibit 21.4
Financial objectives for an NHS Trust

1 Taking one financial year with another, to ensure that a balance is maintained between income available to the Trust and expenditure properly chargeable against that income.

2 To achieve a surplus before interest of 6% on average net assets.

The budget shown in Exhibit 21.5 fails by £2m to meet the required surplus. Since there is another target of maintaining a balance taking one year with another, we would now ask whether the previous year also fell below the required standard. If the trend was towards continuing a deficit there would be some concern.

Exhibit 21.5
Budget for next year

Sources of income	£m
For patient services	
Health Board	144
Other Boards	16
Education and training grants	23
Total income from activities	183
Operating expenses	
Clinical services	120
Hotel services	6
Other support services	22
Transport and travel	2
Depreciation and amortisation	20
Research and development	4
	174
Budgeted surplus	9
Required surplus to meet 6% target	11

21.6.2 Output-based budget systems

It would be equally valid to approach the budgetary process from a totally different direction and concentrate on **outputs** from the process. An output-based approach could be taken by any organisation, but the greatest extent of its practical application has been observed in the non-profit-making organisations, where their activity output is the most important focus of their work.

An output-based approach to budgeting requires starting with an estimate of the quantity and quality of service to be provided. For the non-profit-making organisation the service output takes the place of sales for the profit-seeking organisation. Having defined the desired output the organisation then budgets to determine what will be required to achieve that output. If the organisation is a charity, it will then set about fund-raising. If it is central or local government, it will levy taxes. If the charitable funds available, or the tax revenues to be generated, do not meet all the requirements, then the output activities may be curtailed.

Such an output-based approach focuses on programmes of action. Various budgeting techniques have been suggested for dealing with output-based budgets. Two such techniques are planning, programming budgeting systems (PPBS) and zero-base budgeting (ZBB).

Planning, programming budgeting systems

Planning, programming budgeting systems (PPBS) is an approach that seeks to separate the policy planning aspects of budgeting from the short-term financial planning process. From the overall objectives, the organisation moves on to identify the programmes which will achieve those objectives. The costs and benefits of each programme are then identified so that the programmes may be given relative priorities. Subjective judgement is required to select the most suitable programmes for implementation and the resources required are then allocated to those programmes.

The techniques of PPBS were advocated with enthusiasm in the USA for government budgeting in the 1970s, but by the 1980s had disappeared from favour. The reason was that although the system sounds ideal, it is very difficult to administer because government departments are not organised by outcomes; they are organised on an input basis. In the late 1990s the state of Florida began new attempts to use programme budgets, with a focus on performance. As an example, the Department of Children and Family Services proposed programmes around specific groups such as persons with mental health problems. The agency then focused on achievement targets such as improving mental health, rather than on input targets such as providing specific hours of consultation. It was difficult to plan budgets forward on a programme basis because of the lack of adequately robust unit cost information. The budgets were mainly used as quantified confirmation that targets had remained within funding limits.

A programme to integrate into the community patients who have suffered mental illness may be taken as an example of PPBS. Such a programme will require the establishment of houses where the former patients may enjoy a degree of independence but will have access to help should it be required. That will involve a social welfare aspect and will increase the burden on the budget of the social services. The hospitals will have fewer long-stay mental patients and so will be able to close psychiatric wards. The health service will regard the corresponding funding as being released for other health service purposes such as acute medical care. Thus a programme which might be seen as having a positive social outcome may not result in a mutually amicable budgetary process where the two input departments are not under any constraint to work in harmony on achieving the overall objective.

The fact that PPBS has not worked effectively in a government budgeting context may be due more to the organisation of government departments than to any intrinsic weakness in the concept. If the organisation's objectives are set in terms of programmes, then the organisational structure needs to reflect those programmes or it risks being ineffective if employees relate more closely to their input function than to the defined outputs.

Zero-based budgeting

Zero-base budgeting (ZBB) was devised as a reaction to the traditional incremental approach to budgeting. That traditional approach favoured starting with the previous year's expenditure budget, adding a percentage to cover inflation and making adjustment for any unusual factors or incremental changes. The success of the incremental approach depended critically on the suitability of the previous year's figures. Any errors in estimation would continue indefinitely.

Zero-base budgeting requires a completely clean sheet of paper every year. Each part of the organisation has to justify over again the budget it requires. Some thought-provoking questions may need to be answered, such as:

- What is the need for this activity?
- How much of it is needed?
- Is there a more cost-effective way of carrying it out?
- What is the optimal cost?

The approach is particularly useful for the output-driven approach to budgeting because it forces questions to be asked about the programmes planned and the cost–benefit aspects of the plans. On the negative side, it is a time-consuming activity and is perhaps most usefully applied on a selective basis where the questioning approach is most useful. Some activities of an organisation carry an element of discretion and it is worthwhile reappraising them on occasions. Others form an essential core, so that it might be less appropriate to take a zero-based approach.

Activity 21.4

Write down your personal budget for (a) the week ahead, and (b) the month ahead. Show money coming in and money going out. How difficult is it to prepare a budget? What problems did you encounter? To what extent is uncertainty about the future a problem? In the example which follows there is no uncertainty – it assumes the future may be forecast precisely. Work through the example and then consider how much such an exercise would be affected by uncertainty in the real world.

21.7 Practical example – development of a budget

This practical example is based on the operational budgeting in the company called DressSense Partnership. There are two working partners who have built up, over ten years, a small but successful business which makes a range of ladies' dresses sold through boutiques and selected regional department stores. The image of an exclusive label is maintained by not selling through national department stores. The example sets out the mission statement and objectives of the company. It then sets out the budget details for Year 5, as agreed by line managers after negotiations in the later months of Year 4, together with the balance sheet expected at 31 December Year 4 as a starting point to the budget preparation for Year 5.

To help the reader follow the trail through the practical example, each table of information has a reference of the type (T 1) at the top left-hand corner. This reference is used in later tables to give a cross-reference to the source of data used in calculation. It is always good practice, in working practical examples, to give plenty of cross-referencing and to show full workings so that the reader can follow the sequence.

21.7.1 Mission statement and objectives

BestGear Partnership

Mission statement
The company intends to maintain its position in a niche market in supplying fashionable designer dresses at affordable prices for the discerning buyer. The relatively small scale of the operation will be maintained as part of the attraction of the product.

The two working partners, who together own the business, are committed to maintaining a close relationship with customers and staff so that quality of service remains uppermost at all times.

Objectives
- The company intends to recruit high-quality staff.
- The company will continue its no-quibble money-back-within-30-days policy.
- The company has a target gross profit of at least 35% on total sales.

21.7.2 Budget details for Year 5 as agreed by line managers after negotiations

The information presented in Tables T 1 to T 5 has been agreed by the line managers as a basis for preparation of the master budget and its component parts for Year 5.

Sales and production volumes and direct costs

(T 1)

	Evening	*Smart casual*	*Holiday wear*
Unit sales for year	900	1,200	1,500
	£	£	£
Unit selling price	510	210	150
Unit variable cost:			
Direct material	100	80	70
Direct labour	80	70	65

Direct labour costs are based on an average cost of £16,000 per person per year.

Other costs

(T 2)

Production heat and light	£7,000 for the year
Production business rates	£5,000 for the year
Partners' salaries	£60,000 for the year
Rent of premises	£10,000 for the year
Office staff salaries	£56,250 for the year
Marketing and distribution	20% of sales

Working capital targets

(T 3)

Debtors at end of year	One-and-a-half months' sales.
Trade creditors for material	One month's purchases.
Stock of raw materials	Enough for 80% of next month's production.
Stock of finished goods	No stock held, as goods are made to order and delivered to the customer when completed.

Sales and purchases are planned to be spread evenly over the year.

Capital budget plans

(T 4)

Purchase one new cutting and sewing machine at £80,000, at the start of the year.
Depreciate all machinery for full year at 15% per annum on a straight-line basis.

Balance sheet at 31 December Year 4

(T 5)

	£	£
Equipment at cost		100,000
Accumulated depreciation		30,000
Net book value		70,000
Stock of raw materials:		
For 56 evening @ £100 each	5,600	
For 85 smart casual @ £80 each	6,800	
For 80 holiday wear @ £70 each	5,600	
Trade debtors	83,000	
Cash	3,000	
	104,000	
Trade creditors	23,000	
Net current assets		81,000
Total assets *less* current liabilities		151,000
Partners' ownership interest		151,000

21.7.3 Preparation of individual budgets

From the information presented in Tables T 1 to T 5 the various detailed budgets are prepared as shown in Tables T 6 to T 18. These lead to the master budget set out in Tables T 19 to T 21.

Sales budget: sales and debtors

The sales budget sets out the volume of sales expected for each product, multiplied by the expected selling price, to obtain the total sales by value expected for each product. The total sales for the year ahead may then be calculated, shown in bold print in the sales budget.

(T 6)

Sales budget	*Ref.*	*Evening*	*Smart casual*	*Holiday wear*	*Total for year*
Unit sales for year	*T 1*	900	1,200	1,500	
		£	£	£	£
Unit selling price	*T 1*	510	210	150	
Total sales		459,000	252,000	225,000	**936,000**

The year-end debtors are calculated as one and a half months' sales (one-eighth of the total year's sales if these are spread evenly throughout the year).

(T 7)

Debtors budget	*Ref.*	*Evening* £	*Smart casual* £	*Holiday wear* £	*Total for year* £
Total sales	*T 6*	459,000	252,000	225,000	936,000
		divide by 8	divide by 8	divide by 8	
Debtors at year-end		57,375	31,500	28,125	**117,000**

Production plan

The production plan starts with the volume of output, calculated by taking the planned sales volume and adjusting this for planned levels of opening and closing stock of finished goods. If it is planned to have a level of closing stock, then this will require additional production. To the extent that there exists stock at the start of the period, that will reduce the need for current production. From T 3 it may be noted that the business plans to have no amounts of opening or closing stock because all units are made to specific order. That is a simplification introduced to keep the length of this exercise reasonable, but it is somewhat unusual because most businesses will hold stock of finished goods ready for unexpected demand. As a reminder that stock plans should be taken into account, the production plans in T 8 are shown with lines for opening and closing stock of finished goods.

(T 8)

Production plan in units	*Ref.*	*Evening*	*Smart casual*	*Holiday wear*
Planned sales volume	*T 1*	900	1,200	1,500
add: Planned closing stock of finished goods	*T 3*	–	–	–
less: Opening stock of finished goods	*T 3*	–	–	–
Planned unit production for year		900	1,200	1,500

Direct materials budget: purchases, stock and trade creditors

Once the production plan has been decided, the costs of the various inputs to production may be calculated. Direct materials must be purchased to satisfy the production plans, but the purchases budget must also take into account the need to hold stock of raw materials. After the purchases budget has been quantified in terms of cost, the impact on trade creditors may also be established.

The purchases budget (calculated in T 9) is based on the units of raw material required for production in the period, making allowance for the opening and closing stock of raw materials. The plan is to hold sufficient stock at the end of the period to meet 80% of the following month's production (see T 3). The number of units to be purchased will equal the number of units expected to be used in the period, plus the planned stock of raw materials at the end of the period minus the planned stock of raw materials at the start of the period (calculated in T 9).

(T 9)

Purchases budget in units	*Ref.*	*Evening*	*Smart casual*	*Holiday wear*
Production volume	*T 8*	900	1,200	1,500
add: Raw materials stock planned for end of period	*T 3*	60 (80% of 900/12)	80 (80% of 1,200/12)	100 (80% of 1,500/12)
less: Raw materials stock held at start of period	*T 5*	56	85	80
Purchases of raw materials planned		904	1,195	1,520

(T 10)

Purchases budget in £s	*Ref.*	*Evening*	*Smart casual*	*Holiday wear*	*Total for year*
Volume of purchases (units)	*T 9*	904	1,195	1,520	
		£	£	£	£
Cost per unit	*T 1*	100	80	70	
Total purchase cost		90,400	95,600	106,400	**292,400**

Trade creditors are calculated as one month's purchases (see T 3), a relatively uncomplicated procedure in this instance because the purchases remain constant from month to month. The purchases made during December will be paid for after the end of the accounting period.

(T 11)

One month's purchases 292,400/12	**£24,367**

The direct materials to be included in the cost of goods sold must also be calculated at this point, for use in the budgeted profit and loss statement. The direct materials to be included in the cost of goods sold are based on the materials used in production of the period (which in this example is all sold during the period).

(T 12)

Direct materials cost of goods sold	*Ref.*	*Evening*	*Smart casual*	*Holiday wear*	*Total for year*
Production (units)	*T 8*	900	1,200	1,500	
		£	£	£	£
Materials cost per unit	*T 1*	100	80	70	
Total cost of goods to be sold		90,000	96,000	105,000	**291,000**

Direct labour budget

The direct labour budget takes the volume of production in units and multiplies that by the expected labour cost per unit to give a labour cost for each separate item of product and a total for the year, shown in bold print.

(T 13)

Direct labour budget	*Ref.*	*Evening*	*Smart casual*	*Holiday wear*	*Total for year*
Production (units)	*T 8*	900	1,200	1,500	
		£	£	£	£
Labour cost per unit	*T 1*	80	70	65	
Total cost		72,000	84,000	97,500	**253,500**

It is also useful to check on the total resource requirement which corresponds to this total labour cost, since it takes time to plan increases or decreases in labour resources. The average direct labour cost was given in T 1 as £16,000 per person per year. The following calculation assumes that the employees can work equally efficiently on any of the three product lines.

(T 14)

Resource requirement: Based on an average cost of £16,000 per person per year, the total labour cost of £253,500 would require 15.8 employees. All are part-time workers.

Production overhead budget

Production overheads include all those overhead items which relate to the production activity. In this example it includes heat and light, business rates and depreciation. Depreciation is calculated at a rate of 15% on the total cost of equipment held during the year (£100,000 at the start, as shown in T 5, plus an additional £80,000 noted in T 4).

(T 15)

Production overhead budget	*Ref.*	£
Heat and light	*T 2*	7,000
Business rates	*T 2*	5,000
Depreciation	*T 4*	27,000
Total		**39,000**

Total production cost budget

Total production cost comprises the cost of direct materials, direct labour and production overhead.

(T 16)

Production cost budget	*Ref.*	£
Direct materials	*T 12*	291,000
Direct labour	*T 13*	253,500
Production overhead	*T 15*	39,000
Total		**583,500**

Administration expense budget

The administration expense budget includes the partners' salaries because they are working partners and their labour cost represents a management cost of the operations. The fact that the managerial role is carried out by the partners, who are also the owners of the business, is not relevant to the purposes of management accounting. What is important is to record a realistic cost of managing the business. Other administration costs in this example are rent of premises and the salaries of office staff (as shown in T 2).

(T 17)

Administration budget	*Ref.*	£
Partners' salaries (drawn monthly in cash)	*T 2*	60,000
Rent of premises	*T 2*	10,000
Office staff	*T 2*	56,250
Total		**126,250**

Marketing expense budget

The marketing expense budget relates to all aspects of the costs of advertising and selling the product. The information in T 2 specifies a marketing cost which is dependent on sales, being estimated as 20% of sales value.

(T 18)

Marketing expense budget	*Ref*	£
20% of £936,000	*T 2 & T 6*	**187,200**

21.7.4 Master budget

The master budget has three components: the budgeted profit and loss account for the year, the budgeted cash flow statement and the budgeted balance sheet. These are now set out using the foregoing separate budgets. Where the derivation of figures in the master budget should be evident from the earlier budgets, no explanation is given, but where further calculations have been performed these are shown as working notes.

Budgeted profit and loss account

(T 19) Budgeted profit and loss account for the year ended 31 December Year 5

	Ref.	*Evening* £	*Smart casual* £	*Holiday wear* £	***Total for year*** **£**
Total sales	*T 6*	459,000	252,000	225,000	**936,000**
Materials cost	*T 12*	90,000	96,000	105,000	**291,000**
Labour cost	*T 13*	72,000	84,000	97,500	**253,500**
Total variable cost		162,000	180,000	202,500	**544,500**
Contribution		297,000	72,000	22,500	**391,500**
% on sales		*64.7%*	*28.6%*	*10.0%*	*37.7%*
Production overhead	*T 15*				**39,000**
Gross profit					**352,500**
Administration cost	*T 17*				**126,250**
Marketing cost	*T 18*				**187,200**
Net profit					**39,050**

Budgeted cash flow statement

Where expenses are paid for as soon as they are incurred, the cash outflow equals the expense as shown in the budgeted profit and loss account. In the case of cash collected from customers, debtors at the start and end of the period must be taken into the calculation. In the case of cash paid to suppliers the creditors at the start and end of the period must be taken into account. The cash flow statement contains references to working notes which follow the statement and set out the necessary detail.

(T 20) Budgeted cash flow statement for the year ended 31 December Year 5

	Note	£	£
Cash to be collected from customers	*1*		902,000
Cash to be paid to suppliers	*2*	291,033	
Direct labour	*3*	253,500	
Heat and light	*3*	7,000	
Business rates	*3*	5,000	
Partners' salaries	*3*	60,000	
Rent of premises	*3*	10,000	
Office staff costs	*3*	56,250	
Marketing costs	*3*	187,200	
			869,983
Net cash inflow from operations			32,017
New equipment to be purchased			80,000
Net cash outflow			(47,983)
Cash balance at beginning			3,000
Cash balance at end			(44,983)

Note 1: Cash to be collected from customers	*Ref.*	£
Sales during the period	*T 6*	936,000
less: Credit sales which remain as debtors at the end of the year	*T 7*	117,000
		819,000
add: Cash collected from debtors at the start of the year	*T 5*	83,000
Cash to be collected from customers		902,000

Note 2: Cash to be paid to suppliers	*Ref.*	£
Purchases during the period	*T 10*	292,400
less: Credit purchases which remain as creditors at the end of the year	*T 11*	24,367
		268,033
add: Cash paid to creditors at the start of the year	*T 5*	23,000
Cash to be paid to suppliers		291,033

Note 3: Other cash payments

It has been assumed, for the convenience of this illustration, that all other expense items are paid for as they are incurred. In reality, this would be unlikely and there would be further calculations of the type shown in Note 2, making allowance for creditors at the start and end of the period.

Budgeted balance sheet

(T 21) Budgeted balance sheet at 31 December Year 5

	Note	£	£
Equipment at cost	*1*		180,000
Accumulated depreciation	*2*		57,000
Net book value			123,000
Stock of raw materials	*3*	19,400	
Trade debtors (T 7)		117,000	
		136,400	
Bank borrowing (T 20)		44,983	
Trade creditors (T 11)		24,367	
		69,350	
Net current assets			67,050
Total assets less current liabilities			190,050
Partners' ownership interest	*4*		190,050

Note 1

		£
Equipment at cost = £100,000 + £80,000	=	180,000

Note 2

Accumulated depreciation = £30,000 + £27,000	=	57,000

Note 3

Stock of raw materials:

For 60 evening @ £100 each	6,000
For 80 smart casual @ £80 each	6,400
For 100 holiday wear @ £70 each	7,000
	19,400

Note 4

Partners' ownership interest = £151,000 + £39,050	=	190,050

21.7.5 Interpretation of the practical example

Fiona McTaggart has reviewed the budget illustrated here and now offers some comments.

FIONA: *This illustration shows how much detail has to go into even the simplest of budgeting exercises. Comparing the budget with the statement of objectives, I was a little surprised to find no provision in the budgeted profit and loss account in relation to the money-back promise. If I were involved in this exercise I would include a provision based on past experience of the level of returns. That wouldn't affect the cash flow of course because provisions are accounting allocations with no cash flow implications.*

The target gross profit percentage will be achieved overall (gross profit shown in the master budget is 41.8% of total sales) but is heavily dependent on the high margin on evening wear. I hope there is plenty of market research to back up those sales projections. The overall net profit budgeted is 4.2% of total sales, which means there is little scope for error before the budgeted profit turns to a budgeted loss.

The budgeted cash flow statement shows an overall surplus on operations of the year, turning to a cash deficit when the effect of buying the new equipment is brought into the calculation, but that does not tell the whole story. The £80,000 cash outlay for the new equipment is needed at the start of the year whereas the cash inflows will be spread over the year, so the company will need to borrow early in the year to pay for the equipment. There will have to be a monthly statement of cash flows to show the bank how the cash will flow out and in over the year as a whole. The borrowing could perhaps be short-term *borrowing in view of the overall surplus, but there are other potential cash flows which are not dealt with here. The partners are working partners and are taking salaries in cash but they may also need to draw out more cash to pay their tax bills.*

It is interesting to compare these management accounts with the way in which external reporting for financial purposes might appear. The textbooks always suggest that partners' salaries are an appropriation of profit for financial reporting purposes and should appear as such in the partners' capital accounts with a matching entry for drawings.

That's all far too elaborate for management accounting purposes. What matters here is that these are working partners and if they did not do the work, someone else would have to. Provided the salary is a reasonable representation of a reward for the work done, it is far more sensible to show the expense in the profit and loss account.

21.8 Shorter budget periods

The illustration in section 21.7 is based on a 12-month period for relative ease of illustration. Management accounting information is demanded more frequently than this in reality. The following example of Newtrend shows the budget preparation on a quarterly basis. Most businesses budget monthly, with some producing figures more frequently than that.

21.8.1 Worked example: data

Newtrend Ltd is a new business which has been formed to buy standard radio units and modify them to the specific needs of customers.

The business will acquire fixed assets costing £200,000 and a stock of 1,000 standard radio units on the first day of business. The fixed assets are expected to have a five-year life with no residual value at the end of that time.

Sales are forecast as follows:

	Year 1				*Year 2*
	Quarter 1	*Quarter 2*	*Quarter 3*	*Quarter 4*	*Quarter 1*
Modified radio units	8,100	8,400	8,700	7,800	8,100

The selling price of each unit will be £90.

The cost of production of each unit is specified as follows:

	£
Cost of standard unit purchased	30
Direct labour	33
Fixed overhead	12
	75

The fixed overhead per unit includes an allocation of depreciation. The annual depreciation is calculated on a straight-line basis and is allocated on the basis of a cost per unit to be produced during the year.

Suppliers of standard radio units will allow one month's credit. Customers are expected to take two months' credit.

Wages will be paid as they are incurred in production. Fixed overhead costs will be paid as they are incurred.

The stock of finished goods at the end of each quarter will be sufficient to satisfy 20% of the planned sales of the following quarter. The stock of standard radio units will be held constant at 1,000 units.

It may be assumed that the year is divided into quarters of equal length and that sales, production and purchases are spread evenly throughout any quarter.

Required

Produce, for each quarter of the first year of trading:

(a) the sales budget;
(b) the production budget; and
(c) the cash budget.

21.8.2 Quarterly budgets

This section sets out a solution in the form of quarterly budgets. Note that in cases of this type there will often be more than one way of interpreting the information given. That is not a problem provided the total column is used to check for arithmetic consistency.

Sales budget

Selling price £90 per unit:

	Year 1				*Total*
	Quarter 1	*Quarter 2*	*Quarter 3*	*Quarter 4*	
Modified radio units	8,100	8,400	8,700	7,800	33,000
	£	£	£	£	£
Sales	729,000	756,000	783,000	702,000	2,970,000

Production budget for each quarter

By units, production must meet the sales of this quarter and 20% of the planned sales of the next quarter:

	Year 1				*Total*
	Quarter 1	*Quarter 2*	*Quarter 3*	*Quarter 4*	
Modified radio units	*8,100*	*8,400*	*8,700*	*7,800*	*33,000*
For sales of quarter	8,100	8,400	8,700	7,800	33,000
Add 20% of next quarter sales	1,680	1,740	1,560	1,620	1,620
	9,780	10,140	10,260	9,420	
Less stock of previous quarter	–	1,680	1,740	1,560	
Production required	9,780	8,460	8,520	7,860	34,620

Converting from units of production to costs of production

	Year 1				*Total*
	Quarter 1	*Quarter 2*	*Quarter 3*	*Quarter 4*	
Units to be produced	9,780	8,460	8,520	7,860	34,620
	£	£	£	£	£
Direct materials	293,400	253,800	255,600	235,800	1,038,600
Direct labour	322,740	279,180	281,160	259,380	1,142,460
Fixed overhead*	117,360	101,520	102,240	94,320	415,440
	733,500	634,500	639,000	589,500	2,596,500
*Includes depreciation of	11,300	9,776	9,844	9,080	40,000

Note that fixed overhead includes depreciation of £40,000 per annum, allocated on the basis of a cost per unit produced. Total production is 34,620 units so depreciation is £1.155 per unit.

Cash budget for each quarter

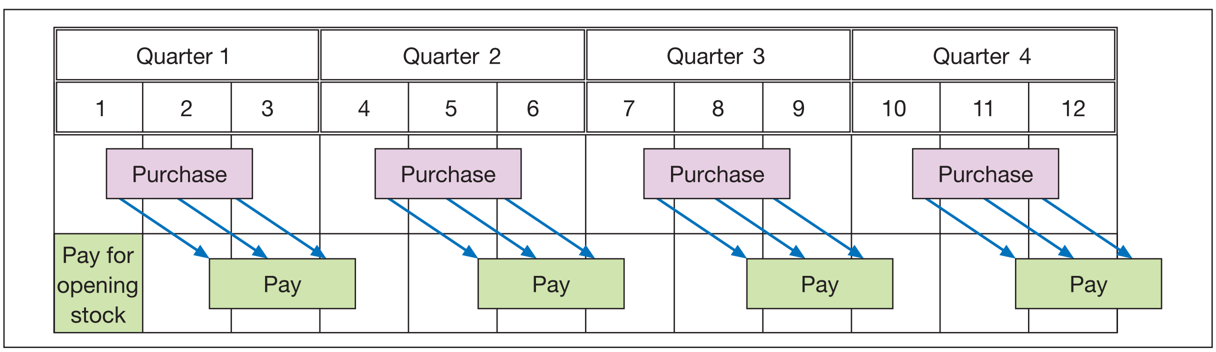
	Year 1				*Total*
	Quarter 1	*Quarter 2*	*Quarter 3*	*Quarter 4*	
	£	£	£	£	
Cash from customers					
$^1/_3$ current quarter	243,000	252,000	261,000	234,000	
$^2/_3$ previous quarter	–	486,000	504,000	522,000	
Total cash received	243,000	738,000	765,000	756,000	2,502,000
Purchase of fixed assets	200,000				200,000
Payment to suppliers**	225,600	267,000	255,000	242,400	990,000
Wages	322,740	279,180	281,160	259,380	1,142,460
Fixed overhead (excl. depn.)	106,060	91,744	92,396	85,240	375,440
Total cash payments	854,400	637,924	628,556	587,020	2,707,900
Receipts less payments	(611,400)	100,076	136,444	168,980	(205,900)

**Schedule of payments to suppliers.

	Quarter 1	*Quarter 2*	*Quarter 3*	*Quarter 4*	*Total*
	£	£	£	£	£
Direct materials purchased	293,400	253,800	255,600	235,800	1,038,600
Payment for initial stock	30,000				30,000
Two months' purchases	195,600	169,200	170,400	157,200	
One month from previous qtr	–	97,800	84,600	85,200	78,600
Total payment	225,600	267,000	255,000	242,400	990,000

There are three months in each quarter so some care is required in working out what amounts are paid to suppliers in each quarter. The schedule of payments to suppliers shows, in quarter 1, the payment for initial stock of 1,000 units (which occurs at the beginning of month 2). It also shows in quarter 1 the payment for purchases that took place in the first two months of that quarter. The purchases of the final month of quarter 1 are paid for in quarter 2, along with the purchases of the first two months of that quarter. Stock remains constant at 1,000 units and so the pattern of payments continues to the end of the year where there is a trade creditor for the one month's unpaid purchases of quarter 4. Exhibit 21.6 shows the pattern of purchases and payment.

Exhibit 21.6
Purchases and payment where suppliers allow one month's credit



21.8.3 Comment on cash budget

A cash budget is the type of statement which would be required by someone being asked to lend money to the business. The start-up situation requires cash but there is a positive cash flow from operations. The lender would want to add to the cash budget a schedule of loan repayments and interest payments to see whether the operational cash flows could meet the financing needs of the business.

21.9 Summary

In this chapter you met the definition of a budget as a detailed plan that sets out, in money terms, the plans for income and expenditure in respect of a future period of time. It is prepared in advance of that time period and is based on the agreed objectives for that period of time, together with the strategy planned to achieve those objectives.

The short-term budgetary process plays its part in **long-range planning**. The administration of the budgeting process has been described and the benefits of budgeting have been put forward in terms of planning and control. The chapter has developed in detail a practical example of the preparation of a master budget.

Key themes in this chapter are:

- **A budgetary system** serves the needs of management in making judgements and decisions, exercising planning and control and achieving effective communication and motivation.
- **Long-range planning** begins with a vision statement setting out a vision for the future direction of the organisation. From this vision the long-range objectives are set covering a period of perhaps three to five years.
- A **strategy** describes the courses of action to be taken in achieving the long-range objectives. The different functions of the organisation will work together in developing the strategy.
- **Budgetary planning and control** provides a method of quantifying the strategy of the business.
- A **budget** is a detailed plan which sets out, in money terms, the plans for income and expenditure in respect of a future period of time. It is prepared in advance of that time period and is based on the agreed objectives for that period of time, together with the strategy planned to achieve those objectives.
- Administration of a budget requires a **budget committee** which will design the strategy, co-ordinate the inputs and communicate the objectives and strategy.
- Budget preparation usually starts with the **sales budget** because sales are the critical factor. From this the **operational budgets** are formed, leading to a finance plan and then the **master budget**, which consists of a budgeted profit and loss account, a budgeted balance sheet and a budgeted cash flow statement.
- Budgets may be **participative** through a bottom-up process, or **imposed** through a top-down process. A **negotiated budget** is based on a mixture of both approaches.
- Co-ordination and review by the budget committee may lead to a further round of negotiation in order to arrive at the best position for the entity as a whole, before final acceptance by the budget committee.
- The benefits of budgeting are seen in planning, control, communication and co-ordination. They also provide a basis for **performance evaluation**.
- The behavioural aspects have been outlined here as an introduction to a major area of study which will be encountered in subsequent study of the subject.
- The detailed case study in the chapter shows the sequence of preparation of all budgets leading to the **master budget**.

QUESTIONS

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

A Test your understanding

A21.1 Explain the purpose of long-range planning. (Section 21.2.1)

A21.2 Explain the purpose of setting a strategy. (Section 21.2.2)

A21.3 Define the term 'budget'. (Section 21.2.3)

A21.4 What is the role of the budget committee? (Section 21.3.1)

A21.5 What is the role of the accounting department? (Section 21.3.2)

A21.6 What is the sequence of the budgetary process? (Section 21.3.3)

A21.7 How does budgeting help the management function of planning? (Section 21.4.1)

A21.8 How does budgeting help the management function of control? (Section 21.4.2)

A21.9 How does budgeting help the management function of communication and co-ordination? (Section 21.4.3)

A21.10 What are the behavioural aspects of budgeting which may give rise to problems? (Section 21.5.1)

A21.11 How may these behavioural problems be avoided or minimised? (Section 21.5.1)

A21.12 What are the limitations of line item budgets? (Section 21.6.1)

A21.13 Explain the nature and purpose of planning, programming budgeting systems (PPBS). (Section 21.6.2)

A21.14 Explain the nature and purpose of zero-base budgeting (ZBB). (Section 21.6.2)

A21.15 [S] A company has 1,000 units of finished goods held in store at the start of the month. It produces a further 4,000 units during the month and sells 4,200. How many units are in store at the end of the month?

A21.16 [S] The sales budget for the BeeSee Company for the first six months of the year is:

	£
January	12,000
February	13,000
March	14,000
April	13,500
May	12,600
June	11,100

There are no debtors at the start of January. One month's credit is allowed to customers. What is the budgeted cash received in each month?

A21.17 [S] Trade creditors at the start of January are £12,500. They are all paid during January. During the month, goods costing £18,000 are purchased, and at the end of January there is an amount of £13,600 owing to trade creditors. State the amount of cash paid to trade creditors during January.

A21.18 [S] The cost of indirect materials in any month is 40% variable (varying with direct labour hours) and 60% fixed. The total cost of indirect materials during the month of March was budgeted at £500. During the month of April it is expected that the direct labour hours will be 20% higher than during March. What should be budgeted for the cost of indirect materials in April?

B Application

B21.1 [S]

The Garden Ornament Company manufactures two types of garden ornament: a duck and a heron. The information presented in Tables T 1 to T 5 has been prepared, as a result of discussions by line managers, for the purposes of preparing a master budget for Year 6.

Sales and production volumes and direct costs
(T 1)

	Ducks	*Herons*
Unit sales for the year	8,000	15,000
	£	£
Unit selling price	30	45
Unit variable cost:		
Direct material	14	16
Direct labour	12	13

Direct labour costs are based on an average cost of £15,000 per person per year.

Other costs
(T 2)

Production heat and light	£8,000 for the year
Production fixed overheads	£4,000 for the year
Partners' salaries	£55,000 for the year
Rent of premises	£11,000 for the year
Office staff salaries	£48,450 for the year
Marketing and distribution	18% of sales

Working capital targets
(T 3)

Debtors at end of year	Half of one month's sales.
Trade creditors for materials	One month's purchases.
Stock of raw materials	Enough for 60% of next month's production.
Stock of finished goods	No stock held, as goods are made to order and delivered to the customer on completion.

Sales and purchases are planned to be spread evenly over the year.

Capital budget plans
(T 4)

Purchase one new moulding machine at £70,000, at the start of the year. Depreciate all machinery for a full year at 20% per annum on a straight-line basis.

Balance sheet at 31 December Year 5
(T 5)

	£	£
Equipment at cost		190,000
Accumulated depreciation		40,000
Net book value		150,000
Stock of raw materials:		
For 400 ducks @ £14 each	5,600	
For 750 herons @ £16 each	12,000	
Trade debtors	32,000	
Cash	2,500	
	52,100	
Trade creditors	30,000	
		22,100
		172,100
Partners' capital		172,100

Required
Prepare a master budget and all supporting budgets.

B21.2 [S]
Tools Ltd is a new business which has been formed to buy standard machine tool units and adapt them to the specific needs of customers.

The business will acquire fixed assets costing £100,000 and a stock of 500 standard tool units on the first day of business. The fixed assets are expected to have a five-year life with no residual value at the end of that time.

Sales are forecast as follows:

	Year 1				*Year 2*
	Quarter 1	*Quarter 2*	*Quarter 3*	*Quarter 4*	*Quarter 1*
Modified tool units	4,050	4,200	4,350	3,900	4,050

The selling price of each unit will be £90.

The cost of production of each unit is specified as follows:

	£
Cost of standard unit purchased	24
Direct labour	30
Fixed overhead	10
	64

The fixed overhead per unit includes an allocation of depreciation. The annual depreciation is calculated on a straight-line basis and is allocated on the basis of a cost per unit to be produced during the year.

Suppliers of standard tool units will allow one month's credit. Customers are expected to take two months' credit.

Wages will be paid as they are incurred in production. Fixed overhead costs will be paid as they are incurred.

The stock of finished goods at the end of each quarter will be sufficient to satisfy 10% of the planned sales of the following quarter. The stock of standard tool units will be held constant at 500 units.

It may be assumed that the year is divided into quarters of equal length and that sales, production and purchases are spread evenly throughout any quarter.

Required

Produce, for each quarter of the first year of trading:

(a) the sales budget;
(b) the production budget; and
(c) the cash budget.

B21.3 [S]

Bright Papers Ltd has established a new subsidiary company to produce extra-large rolls of wall covering. Management forecasts for the first four years of trading are as follows:

	Year 1	*Year 2*	*Year 3*	*Year 4*
Sales (in units)	800,000	950,000	1,200,000	1,500,000
Production (in units)	850,000	1,000,000	1,300,000	1,600,000
	£	£	£	£
Selling price per unit	10.20	10.56	11.04	12.00
Costs per unit:				
Direct materials	2.04	2.28	2.64	3.00
Direct labour	0.60	0.75	0.90	0.90
Variable overhead	0.40	0.50	0.60	0.60
Fixed overhead	£5,000,000	£5,100,000	£5,200,000	£5,300,000
Average credit period given to customers	1 month	1 month	1.5 months	2 months
Average credit period taken from suppliers of materials	2 months	1.5 months	1.5 months	1 month

Further information

(a) Estimates for the average credit period given and taken are based on balances at the end of each year.
(b) Costs other than direct materials are to be paid for in the month they are incurred.
(c) The company will adopt the FIFO assumption in relation to cost of goods sold.
(d) No increases in production capacity will be required during the first four years of business.
(e) Fixed overhead costs include depreciation of £1,500,000 per annum.
(f) No stock of direct materials will be held. The supplier will deliver goods daily, as required. No work-in-progress will exist at the end of any year.

Required

Prepare annual cash budgets for the new subsidiary for each of the first four years of trading.

C Problem solving and evaluation

C21.1 [S]

The following budgeted accounting statements were submitted to the board of directors of Alpha Ltd on 1 October Year 4:

Budgeted profit and loss account for the year to 30 September Year 5

	£	£
Sales		15,600,000
Cost of sales		(10,452,000)
Gross profit		5,148,000
Fixed overheads:		
Selling and advertising	(1,500,000)	
General administration	(1,094,500)	
		(2,594,500)
Operating profit		2,553,500
Interest payable on medium-term loan	(135,000)	
Royalties payable on sales	(780,000)	
		(915,000)
Net profit		1,638,500

Budgeted balance sheet at 30 September Year 5, with comparative figures at 1 October Year 4

	30 September Year 5	*1 October Year 4*
	£	£
Fixed assets at cost	2,300,000	1,800,000
less: Accumulated depreciation	(585,000)	(450,000)
	1,715,000	1,350,000
Trading stock	3,200,000	4,000,000
Trade debtors	2,600,000	2,200,000
Cash in bank	1,854,750	–
Total assets	9,369,750	7,550,000
Share capital	4,400,000	4,400,000
Retained earnings	3,313,500	1,675,000
	7,713,500	6,075,000
Medium-term loan	1,000,000	1,000,000
Trade creditors	656,250	475,000
	9,369,750	7,550,000

At 31 March Year 5 the following information was available in respect of the first six months of the trading year:

(a) Sales were 20% below the budgeted level, assuming an even spread of sales throughout the year.
(b) The gross profit percentage was two percentage points below the budgeted percentage.
(c) Actual advertising expenditure of £100,000 was 50% below the budgeted amount. All other selling expenses were in line with the budget.
(d) General administration costs were 10% below the budgeted level.
(e) Trading stock at 31 March was £200,000 higher than the budgeted level. It was assumed in the budget that stock would decrease at a uniform rate throughout the year.
(f) Trade debtors at 31 March were equivalent to two months' actual sales, assuming sales were spread evenly throughout the six months.
(g) Trade creditors at 31 March were equivalent to one month's actual cost of goods sold, assuming costs were spread evenly throughout the six months.
(h) On 1 January Year 5 the rate of interest charged on the medium-term loan was increased to 16% per annum.

The budget for the second six months was revised to take account of the following predictions:

(a) Revenue during the second six months would continue at the level achieved during the first six months.
(b) Cost control measures would be implemented to restore the gross profit percentage to the budgeted level.
(c) Advertising, selling and general administration costs would be maintained at the levels achieved in the first six months.
(d) Trading stocks would be reduced to the level originally budgeted at 30 September.
(e) Trade debtors would be reduced to the equivalent of one month's sales.
(f) Trade creditors would be maintained at the equivalent of one month's cost of goods sold.
(g) Interest on the medium-term loan would remain at 16% per annum.

The directors of the company wish to know what change in the cash in bank will arise when the revised budget for the second six months is compared with the consequences of continuing the pattern in the first six months.

Taxation has been ignored.

Required

1 Prepare an accounting statement for the six months to 31 March Year 5 comparing the actual results with the original budget.

2 Prepare a revised budget for the second six months and compare this with the actual results which would have been achieved if the pattern of the first six months had continued.

C21.2

Holyrood Products Ltd makes cassette recorders. The management accountant has produced the following summary of the company's trading in the year ended 30 June Year 3:

	£	£
Sales: 30,000 recorders		375,000
add: Increase in finished goods stock		16,000
		391,000
Deduct:		
Direct materials	128,000	
Direct labour	96,000	
Works and administration overhead	50,000	
Selling overhead	20,000	
		294,000
Trading profit		97,000

The following additional information is available:

(a) Works and administration overhead was 64% variable and 36% fixed, the latter including £2,500 for depreciation of plant surplus to current requirements.
(b) Selling overhead was 75% variable and 25% fixed.
(c) For management accounting purposes, finished goods stock is valued at variable cost excluding selling overhead.
(d) There was an increase of 2,000 units in finished goods stock over the year.

The production manager has made the following estimates for the year to 30 June Year 4 which show that:

(a) The excess plant will be utilised for the production of a radio and a watch in quantities of 5,000 and 10,000 respectively. The variable costs are:

	Radio £	*Watch* £
Direct materials	15,000	10,000
Direct labour	10,000	25,000
Works and administration overhead	2,500	15,000
Selling overhead	4,500	2,250

(b) Finished goods stock of cassette recorders will remain unchanged and stocks of radios and watches will be built up to 10% of production.
(c) Production of cassette recorders will be at the same level as that achieved in the year to 30 June Year 3.
(d) Fixed overhead is as follows:

	Cassette recorder	*Radio* £	*Watch* £
Works and administration	No change	8,000*	13,500*
Selling	60% increase	2,250	6,750

**Note*: excluding depreciation.

(e) Materials costs for cassette recorders will be increased by £1 per unit. Other variable costs will be held at the level attained in the year ended 30 June Year 3.

The marketing director has advised that each product should be priced so as to achieve a 25% profit on total cost.

Required

Prepare a statement of budgeted profit for the year ended 30 June Year 4.

Cases for study groups

Case 21.1

Today's task is to review the first stage of budget preparation in a major hospital dealing with a wide range of medical conditions, including accident and emergency services. (There are indications within the case study of how to allocate the time on the presumption that one hour is available in total, but the times may be adjusted proportionately for a different overall length.)

Before the activity starts obtain and look through the annual report and accounts of a hospital trust and a regional health authority, looking for discussion of the budgetary process and the way in which budgets are presented in the annual report.

Half of the group should form the budget committee, deciding among themselves the role of each individual within the hospital but having regard to the need to keep a balance between medical services, medical support staff and administration. The other half of the group should take the role of speciality team leaders presenting their budgets ('speciality' being the term used to describe one particular specialist aspect of hospital treatment, e.g. children's specialisms (paediatrics) women's conditions (obstetrics and gynaecology), or dealing with older persons (geriatrics)).

Initially the group should work together for 20 minutes to write a mission statement and set of corporate objectives. The budget committee should then hold a separate meeting lasting 10 minutes to decide: (a) what questions they will ask of the speciality team leaders when they present their budget plans, and (b) where the sources of conflict are most likely to be found. In the meantime each speciality team leader should set out a brief statement of objectives for that speciality team and a note of the main line items which would appear in the budget, indicating where conflict with other teams within the hospital is most likely to arise as a result of the budgeting process.

The budget committee should then interview each speciality manager (5 minutes each), with the other speciality managers attending as observers. After all interviews have been held, the budget committee should prepare a brief report dealing with the effectiveness and limitations of the budgetary process as experienced in the exercise. The speciality managers should work together to produce a report on their perceptions of the effectiveness and limitations of the budgetary process (15 minutes).

Case 21.2

As a group you are planning to launch a monthly student newsletter on the university's website. The roles to be allocated are: editor, reporters, webmaster, university accountant, student association representatives. Work together as a team to prepare a list of budget headings for the year ahead and suggest how you would gain access to realistic figures for inclusion in the budget. Include in your budget plan a note of the key risks and uncertainties.