8 Flexible budgets for planning and control

Using CVP analysis for routine planning and control

In Chapter 7, we saw how to use CVP analysis techniques to gain new insights into our business undertakings and the nature of our products and/or services through the eyes of cost structure.

Now, as indicated in Figure 5.1 *Profit Planning Framework*, we can again benefit from the ripple effect of dropping a stone into water – analysing cost behaviour – by applying CVP techniques to routine planning and control decisions.

During the process of preparing forecasts, budgets and 'what if' scenarios for business transaction negotiations, it is important to be able to:

- Know what to expect in the event of not achieving the anticipated level of sales volume or other planned objectives, such as budget targets, conference transaction negotiations and the composition of business mix.
- Compare actual results against past decisions, such as budget projections and key discrete (individual) business actions so as to monitor outcomes and learn for the future.

Note: Managers should never approve estimates or forecasts for action without first assessing the implications of potential under or over-achievement of subsequent results.

Budgets for planning

What happens if we fail to achieve budgeted target? For instance, we may anticipate hotel room occupancy at 75% for the coming year and in the event only achieve 60% occupancy. So, how could a 15 % shortfall in occupancy affect projected annual profit? Knowing the likely consequences of such a shortfall means we can consider a counter strategy, should the situation arise.

Flexible budgets

If we take the case of budget preparation, an effective way to determine the likely position if we under or overachieve projected results is to prepare a 'what if' scenario in the form of a flexible budget prior to the start of the budget period. A flexible budget is simply a budget that can be adjusted – flexed – to take account of different levels of sales volume. With our budgeted profit and loss statement analysed into fixed and variable expenses we can review revenues at various levels of sales volume within the relevant range of our business (usually around ±20% of projected revenue) and determine how profit is likely to be affected.

Note: Although the term 'flexible budget' implies budget preparation, the technique can be applied to a whole range of day-to-day 'what if?' decisions where sales volume is a factor in assessing alternative profit outcomes, such as new business negotiations.

Let's consider an example using the figures of the Anchor Hotel, a 50-room establishment which is open all the year round (365 days). Annual budget projections have been prepared for the coming year and expenses analysed into their fixed and variable categories, as shown in Figure 8.1.

	Budget	
Room occupancy	56%	
Average room rate	£50	
Number of covers	12,000	
Average F&B spend	£25	
Sales Revenue:	£	
Room	511,000	(50 × 365 × 0.56 × £50)
Food	200,000	
Beverage	100,000	
Total revenue	811,000	
Less: variable expenses		
Room Payroll & other expenses (10%)	51,100	(0.10 × £511,000)
Food cost of sales (40%)	80,000	(0.40 × £200,000)
Beverage cost of sales (30%)	30,000	(0.30 × £100,000)
F&B payroll & other expenses (15%)	45,000	(0.15 × £300,000)
Total variable costs [1]	*206,100*	*27%*
Contribution margin (75%)	604,900	
Less: fixed expenses		
Rooms payroll & other expenses	86,870	
F&B payroll & other expenses	60,000	
UOE & fixed charges	403,030	
Total fixed costs [2]	*549,900*	*73%*
Net profit before tax	£55,000	
Total cost for year [1]+[2]	*£756,000*	*100%*

Figure 8.1: Anchor Hotel: Budgeted marginal profit and loss statement (showing workings)

We can see from Figure 8.1, if the actual results exactly match the budget the hotel will generate £55,000 net profit before tax. Since this is highly unlikely, especially in terms of the volume of business, we need to be able to assess the effects on costs and profit if sales volume variations do occur. A flexible budget can assist with this task.

Preparing a flexible budget

In order to estimate how costs and profits will respond to a budget shortfall, or overshoot, we can adjust (flex) the budget to various levels of sales volume and assess the outcomes. So, let's consider a scenario where the Anchor Hotel sales volume varies across all room and restaurant business by ±10%, presented in Figure 8.2 marginal profit statement format, showing contribution margin.

10% less	Budget	10% more	
Sales Revenue:	£	£	£
Room	459,900	511,000	562,100
Food	180,000	200,000	220,000
Beverage	90,000	100,000	110,000
Total revenue	729,900	811,000	892,100
Less: variable expenses			
Room Payroll & other expenses (10%)	45,990	51,100	56,210
Food cost of sales (40%)	72,000	80,000	88,000
Beverage cost of sales (30%)	27,000	30,000	33,000
F&B payroll & other expenses (15%)	40,500	45,000	49,500
Total	185,490	206,100	226,710
Contribution margin (75%)	544,410	604,900	665,390
Less: fixed expenses			
Rooms payroll & other expenses	86,870	86,870	86,870
F&B payroll & other expenses	60,000	60,000	60,000
Undistributed operating expenses)	186,530	186,530	186,530
Fixed charges	216,500	216,500	216,500
Total	549,900	549,900	549,900
Net profit before tax	£(5,490)	£55,000	£115,490

Figure 8.2: Anchor Hotel: Flexible budget (marginal profit and loss statement)

Alternatively, we can prepare the Anchor Hotel flexible budget in traditional (uniform accounting) format, presented in Figure 8.3, showing department variable and fixed expenses and department profits. However, we will proceed with the marginal profit statement format.

Note: The departmental accounting layout may be favoured by managers as it is more informative to heads of departments in relation to their responsibilities.