

VOLTIQUE CO – MODEL ANSWER

ACCA Performance Management (PM) – Section C – Budgeting and control

Use this to mark your own attempt. The written parts are set out using the “4 Kee” rule:

- *Kee (key) word (start with the word which identifies what you are about to talk about)*
- *Keep it simple (not "subsequently", use "next". not "therefore", use "so")*
- *Keep it short (avoid commas, avoid long sentences)*
- *Keep it separate (white space between points). It makes each point easy for a marker to award.*

(a) Rolling budget for the four quarters ending 31 March 20X6

Workings

Revenue starts from the Q1 actual of \$9,600k. It grows at 2% each quarter. $Q2 = 9,600 \times 1.02 = 9,792$. $Q3 = 9,792 \times 1.02 = 9,988$. $Q4 = 9,988 \times 1.02 = 10,188$. $Q1\ 20X6 = 9,600 \times 1.02^4 = 10,391$.

Gross profit margin uses the actual Q1 margin, which now continues: $4,032 / 9,600 = 42\%$. So cost of sales is 58% of revenue.

Selling and distribution is 5% of revenue ($480 / 9,600$ in Q1). Administration is fixed at \$1,150k each quarter.

Rolling budget	Q2 20X5	Q3 20X5	Q4 20X5	Q1 20X6	Total
	\$000	\$000	\$000	\$000	\$000
Revenue	9,792	9,988	10,188	10,391	40,359
Cost of sales (58%)	(5,679)	(5,793)	(5,909)	(6,027)	(23,408)
Gross profit (42%)	4,113	4,195	4,279	4,364	16,951
Selling and distribution (5%)	(490)	(499)	(509)	(520)	(2,018)
Administration costs	(1,150)	(1,150)	(1,150)	(1,150)	(4,600)
Operating profit	2,473	2,546	2,620	2,694	10,333

Note: Should you include the total column even if not asked: The total column is good practice and provides a useful check. However, the requirement only asked for the four quarterly budgets, so a correct answer without the total column should not be penalised. Saying that, it is quick and easy to produce using spreadsheet so ii would include it.

Note: Figures are rounded to the nearest \$000. Small differences caused by rounding are acceptable.

(b) Labour cost of the second batch of the smart lock

The pilot batch is the first batch. It took 8,000 hours. The learning curve gives the cumulative average time per batch. To find the second batch alone, find the total for two batches and take off the first.

Cumulative average for 2 batches: $Y = 8,000 \times 2^{-0.321928} = 6,400$ hours.

Total for 2 batches = $6,400 \times 2 = 12,800$ hours.

Second batch alone = $12,800 - 8,000 = 4,800$ hours.

Labour cost = $4,800 \times \$12 = \$57,600$.

(c) Three weaknesses, and how far rolling budgets fix each

Incremental approach

Incremental budgeting which uses inflation adjusted previous budgeted figures carries forward inefficiencies and out-of-date assumptions. Voltique is a poor fit for this method because its market is moving fast.

Rolling budgets would largely address this because each update would use recent actual results and current market information. This breaks the chain of repeatedly carrying forward figures from old budgets so the budget should reflect Voltique's current costs and market conditions more closely.

Fixed annual targets

Fixed annual targets became impossible to hit once rivals entered the market. Targets that no one believes give little useful control and can push managers into poor decisions.

Rolling budgets address this well by updating the target each quarter so it stays realistic. Pressure to take damaging action like the Q4 discounting is then much lower.

Decisions making

Decisions were based on old budget figures. The board spent \$4m on extra capacity while demand was already falling and that capacity now sits idle.

Rolling budgets would largely fix this because choices would rest on the latest forecast. Budgets used for planning and decision making should be current if Voltique wishes to make good decisions for example whether or not to invest in additional capacity.

You can probably think of several others: look at each problem in the question and see if moving from fixed budget to rolling could help.

(d) Difficulties in moving to rolling budgets

Costs rise because the budget must now be reviewed and extended every quarter rather than being prepared only once a year. This adds ongoing work for the finance team and the managers who supply the figures.

Skills are a further issue as staff are used to a simple yearly update. Re-forecasting properly each quarter is a different task and they will need training to do it well.

Resistance is likely because managers may fear that revised budgets will also be used to change their bonus targets. They may see this as unfair. The reward scheme may need to change alongside the budget.

Note, only three needed. You may think of others. You may also think of different Voltique specifics e.g the resistance to change could be due to the finance team not wanting to change what they are doing.

(e) Using the ERP system and data to help budgeting

Dashboards give up-to-date sales figures for each quarterly re-forecast. Automated data collection also reduces the manual work needed to prepare each update.

Market data feeds show competitor activity and input prices. Analytics tools can use this data to model events such as a new rival or a price rise. This should improve Voltique plan for an uncertain market.

(Total: 20 marks)

ACCA-style marking scheme

	Marks
(a) Use of Q1 actual revenue (\$9,600k) as the starting point	1

Application of 2% compound growth across four quarters, including Q1 20X6	1.5
Gross profit margin of 42% taken from actual results / cost of sales figures	1.5
Selling and distribution costs at 5% of revenue	1
Administration costs fixed at \$1,150k per quarter	0.5
Operating profit and presentation	0.5
Maximum	6
(b) Cumulative average time for two batches (using formula)	1
Total time for two batches and deduction of first (pilot) batch	1.5
Labour cost at \$12 per hour	0.5
Maximum	3
(c) Three weaknesses of the current process, each with discussion of the extent to which rolling budgets address it – up to 2 marks per weakness (1 for the weakness, 1 for the extent), applied to the scenario	6
(d) Difficulties of changing to the new system – 1 mark per relevant, developed point	3
(e) Two ways the ERP system and data analytics could improve budgeting – 1 mark each	2
Total	20