Case study – Decision making and disagreement

This is the solution to the case study found at the end of:

- Chapter 18 *Marginal costing for decision making*

(a)

In calculating contribution as the basis for making a decision on whether or not to accept an order, Vinnie's general approach to the business problem is fine, in principle. Because the business does not have costing systems, it has obviously been difficult for him to establish totals for variable and fixed costs. In consequence, he has had to use estimates, and, of course, these may be quite inaccurate. His basic conclusion, that there will be a positive contribution to fixed overheads from the Jay Johnson contract, appears to be supported by the calculations.

The figures show that the business is certainly profitable, but not very profitable. Net profit as a percentage of sales is only about 6 per cent. Also, the margin of safety at current level of sales appears small. It is possible to calculate an estimated margin of safety based on Vinnie's figures.

$$\text{Break-even point in units} = \frac{\text{Fixed costs}}{\text{Contribution per unit}}$$

$$= \frac{591\ 400}{650} = 910 \text{ (to nearest unit)}$$

Actual sales in 20X7 were 1030 ranges, a margin of safety of 120 units, or 11.7 per cent of actual sales.

Arthur and Vinnie should perhaps be looking at the overall profitability of the business as well as thinking about negotiating special prices on contracts. It may be that costs are not very well controlled. Costs are perhaps higher because of inefficiencies in the production process. Vinnie mentioned the very high cost of heating, and if the factory building is of a poor standard there may be other high costs in maintenance, cleaning and insurance.

(b)

Although A & A Wright is clearly a profitable business, it appears to be facing several problems. Arthur plans to have Vinnie take over the business, but he is not finding it easy to let Vinnie have any say in running it. Arthur is probably going to find it harder than he anticipated to let his son take over completely. In family businesses like this one, relationship problems can create major obstacles to the smooth running of the business. The case study describes a classic succession problem; the father unwilling to admit that his son may be right, and the son equally reluctant to concede that his father might just know a thing or two about running a business.

Is Vinnie correct? If we try to decode what Vinnie is saying, it is actually about a great deal more than the acceptance or non-acceptance of the contract; the subtext is one of impatience with his father's approach to running the business.

Vinnie wants to introduce a more systematic approach to management, using accounting figures to help make business decisions. He also sees, as perhaps his father cannot, that the factory itself has become a liability. Because he has a business studies education he feels, rightly, that he knows a great deal and is capable of generating good ideas. What he obviously lacks is the experience of making real business decisions.

What about Arthur's view? Arthur is impatient with Vinnie's use of figures as an aid to decision making. He dismisses the notion of 'positive contribution to fixed overheads' with contempt. However, he does have a point: there are other factors apart from the figures to consider. If the business sells at such a large discount what impact will there be on other sales? If Leonard of Leonard's Kitchens discovers that Jay Johnson, a new customer, is getting a £250 discount, he will no doubt feel entitled to object to receiving a paltry £30 discount. Accepting this contract may mean a general drop in the selling prices that A & A Wright can command.

Suppose the order from Jay Johnson was accepted, and that it led to a general fall in selling prices to £1050 per range. What would be the effect on the business? Contribution would fall to approximately £420 per range, and the break-even point would become higher. We can estimate a new break-even point based upon lower contribution:

$$\text{Break-even point in units} = \frac{591\ 400}{420} = 1408 \text{ units (to nearest whole unit)}$$

This level of sales is clearly impossible under current circumstances; even if 1408 sales could be sold in theory, the factory capacity at 100 units per month is a limiting factor. If the order were accepted, and if it led to a general fall in prices, the business could be in serious trouble, and might even go under.

Where do Arthur and Vinnie go from here? They have some major problems to tackle, none of which can be solved unless they can find some way of working harmoniously together. One approach would be to take some advice to help them build a strategy for the business that they can both agree on, perhaps by employing the services of a management consultant (but imagine what Arthur would say about that suggestion!). If they do not employ outside help they will have to solve the problems themselves. However, their relationship appears to be deteriorating fast and they may find themselves unable to resolve the problems on their own.

The case study illustrates the following points about decision making:

- Calculations of break-even, contribution and so on, can be very useful in providing input to business decisions.
- There are always other factors to take into account. The correct decision may seem obvious on paper, but matters are rarely so clear in practice.
- Making business decisions is really difficult, especially where human factors play a major role (and that is often the case).