LET'S GET TECHNICAL

Gareth John compares the various methods of costing: this you must know

I had to buy a car recently to replace my fondly missed orange Mini. I went to the car showroom (not a Mini one I'm afraid, my eldest daughter wouldn't allow it) and asked the price of a fairly ordinary 'run-around'. "That one is £460,000" the salesman informed me. "WHAT!! Is it made of gold?" I spluttered. "No," he said, "but my boss said that we need to always charge a price to cover our costs and it cost us £8,000 to assemble that car and our rent for the month is £450,000."

I felt that a lesson in costing was in order so I hope that the salesman in question is reading this article.

Costing

Costing is one of the principle roles of management accounting and we looked at some basic costing terminology in the last issue. In this article I want to think a bit about the two most important costing approaches; absorption costing and marginal costing.

When thinking about costing always bear in mind that the ultimate purpose of costing is to identify the cost of producing each unit of output. This cost can be summarised by pulling together a 'cost card' to list and add up the various costs involved in production.

Absorption costing

I think of absorption costing as 'full costing' because the cost card will include all production costs whether they are variable or fixed.

Variable costs are generally quite easy to deal with as they will tend to be related in some way to a single unit being made. So a single car will require a certain amount of direct materials (steel, wheels, seats etc), a certain amount of direct labour (the staff who assemble the car) and a certain amount of variable overheads (perhaps the electricity used to power the machine that builds the car).

Fixed costs are harder to deal with since the cost incurred will not be related to individual units (by definition a fixed cost has nothing to do with the volume of output) but are often related to periods of time (this is true of rent, rates, electricity, telephone charges and most other utility bills). What we need to do is to be spread the cost over the number of units produced in the period covered to work out an effective cost per unit. This is what we mean by 'absorbing' the cost. So our salesman should have divided the monthly rent cost of £450,000 by all of the cars made in the month.

Marginal costing

I think of marginal costing as 'variable costing' because the cost card will only include variable production costs. This is because the variable costs are the only costs that change if we produce just a single extra car (this is what we mean by 'at the margin'). Fixed costs such as rent will not change as a result of that extra unit of production.

Comparing costs cards

Let's look at how our cost card for making a car would compare using our two costing methods:

	Absorption costing	Marginal costing
Direct costs		
– Direct material (4 wheels at £20 per wheel)	80	80
– Direct labour (2 hours at £15 per hour)	30	30
Prime cost (the total of direct costs)	**110**	**110**
Indirect costs		
– Variable overhead (2 hours at £5 per hour)	10	10
– Fixed overhead (£450,000/50,000 cars made)	9	-
Production cost	**129**	**120**

You will see that:

1. Direct material costs are in both cost cards as they are 'variable' costs and are therefore part of 'full' cost.
2. Direct labour costs are in both cost cards as they are 'variable' costs and are therefore part of 'full' cost.
3. Variable overheads are in both cost cards as they are 'variable' costs and are therefore part of 'full' cost.
4. Fixed overheads are only in the absorption cost card as these are not a 'variable' cost but are part of the 'full' cost. This means that the absorption costing cost card will always give a higher cost per unit as it includes that extra element of fixed cost. This means that absorption costing always gives a higher value to inventory.

Short-term versus long-term

It is often said that marginal costing is more appropriate for use in the short-term, since if you are only looking at changing production levels over a few days your fixed costs will not change so can be ignored. In our example (left), if we made a single extra car one day we would incur extra variable costs of £120, so could in theory get away with charging £125 to sell that car and we would still cover our costs and make £5 (this is what marginal costing calls 'contribution').

If, however, we charged £125 for every car we sold during the whole month we would make a loss of £4 per unit as we would not be covering our fixed costs. This is why absorption costing is felt to be more appropriate in the long-term. So in order to make money (absorption costing calls this 'profit') we would need to charge a regular price of more than £129 per car.

The fact that marginal costing is more relevant in the short term explains why we use the concept of contribution in various forms of 'short-term decision making' such as breakeven analysis and limiting factor analysis. PQ

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