

Article by Bernard Vallely FCCA MBA, relevant to the following subjects;

Professional 1: Managerial Finance

Relevant Costing and Decision Making

A key function of a Financial Manager is to both facilitate and part take in the decision making process. There are many critical decisions to be made in all businesses such as;

- deciding on pricing policy
- deciding whether or nor to make a capital investment

This article will concentrate specifically on how one-off (non-recurrent) decisions are made. Such decisions may include:

- whether or not accept a one-off order
- whether to work an extra shift
- whether to further process an intermediate product in a process costing context
- whether or not to repair/overhaul or salvage an asset

Once the Board of Directors determine that a decision of import must be made, then the typical process by which such decisions are made and the role of the financial manager in this decision making process is best explained as the following number of successive steps.

Step 1

The Financial Manager is charged with identifying and comparing the relevant costs and revenues pertaining to the decision. A report setting out the ultimate financial impact of the decision and the assumptions made will be prepared for the Board's consideration.

Step 2

The report prepared in step 1 will be included in the papers for the Board meeting at which the decision is expected to be made. The Financial Manager will typically be asked to be available for this agenda item (of the Board meeting), in order to answer any questions and/or clarify any matters relating to the report.

Step 3

The Board of Directors will then consider the wider qualitative factors which may be relevant to the decision such as the impact of the decision on customers, suppliers, staff, local communities, the organisation's public image etc., whilst remaining mindful of the financial impact of the decision.

Step 4

The ultimate decision will be made and implemented (or otherwise).

In order for Step 1 to be carried out effectively, the Financial Manager will have to identify the relevant costs and revenues relating to the imminent decision. This process is often referred to as relevant costing. Relevant costing principles may at times seem counter-intuitive, but should be applied in all cases when making one-off decisions.

GENERAL PRINCIPLES

There are three general principles used for determining the relevant costs and revenues relating to a one off decision. These are:

Relevant costs/revenues are the:

- FUTURE. What is past and what is future is determined by reference to the time at which the decision is being made.
- INCREMENTAL. The word incremental refers to financial changes as a result of the decision at hand
- CASHFLOWS. Exclude any non-cash, or notional items from consideration e.g. depreciation.

SPECIFIC RULES

In support of the three general principles for determining relevant costs, there are a number of specific rules that should be followed to help accurately determine the relevant costs and revenues pertaining to a decision. These include:

- a) Sunk costs are irrelevant on the basis as relate to the past
- b) Committed costs are irrelevant on the basis that the decision will not change this commitment
- c) Fixed costs are generally irrelevant, unless the decision involves a stepping up/down in decision specific fixed costs.
- d) Variable costs are relevant as they are typically incremental
- e) When limiting factors exist there are two relevant elements, namely: the cost of factor resource itself and the opportunity cost i.e. the contribution (SP-VC) forgone. In effect, the price achieved in the next most profitable use of the limited resource.
- f) Apportioned/absorbed central costs are generally irrelevant as they are non-incremental
- g) Stock Costs. There are a three potential scenarios to be considered here, namely:
- 1) If the stocks must be replaced (in constant use), the relevant cost is the replacement cost (irrespective of original cost)
- 2) If the stocks are not to be replaced (not in constant use), and they have another economic value and/or residual value. The relevant cost is the higher of the economic value and/or residual value.
- 3) If the stocks are not to be replaced (not in constant use), and they have no other economic value or residual value. The relevant cost is nil.

The following worked example is used to illustrate the above principles.

EXAMPLE

Cape PLC, a steel erector recently tendered for the erection of the sub structure of a grain silo, a one-off contract not expected to be repeated. A summary of the cost estimates used for the purposes of arriving at the tender price is as follows:

Cost Estimates – Grain Silo	€000s
Direct Materials – Steel	600
Direct Materials – Wiring and ancillaries etc	100
Direct Labour-Engineering-3000 hours@€100	
per hr	300
Direct Labour - Unskilled 10000 hours @ €40	
per hr	400
Variable Overheads	150
Fixed Overheads Absorbed	150
Total Estimated	
Cost	1,700

Cape PLC tendered at a price of €2.04 million by adding on a mark-up of 20% to the above costs. It has just been informed that its tender was unsuccessful.

Cape PLC's Managing Director has asked your opinion as to whether the cost estimates on which the tender price was based were correct. You have reviewed the working files and have discerned that:

- engineering hours were in short supply and earn a contribution per hour of €10
- due to the recent cancellation of an order the company expects to have available 6,000 idle unskilled hours available to work on the job. Any additional unskilled labour required is employed on a casual basis
- the wiring was already in stock for the previous job that was cancelled. The wiring has no other use and was to be scrapped at a cost of €10,000.
- fixed overheads represent an allocation of Cape PLC's central fixed overhead. The proposed tender would have incurred specific fixed costs of €20,000
- steel was in stock and cost €600,000. It is regularly used and would be replaced at a cost of €250,000.
- Variable overheads accurately represent light and heat costs

Required

Prepare a revised tender price for Cape PLC's Managing Director if relevant costing principles were applied, and the same percentage mark-up was to be added.

Suggested Solution

Cape PLC - Relevant Cost of Grain Silo			
Detail	€000s	Explanatory Note	
Steel	250000	Stock at replacement cost	
Wiring etc.	-10000	Incremental cost saving	
Engineering Hours	300000	Cost of Hours	
Engineering Hours	30000	Opportunity Cost	
		Committed cost, thus	
Unskilled Hours (first 6000)	0	irrelevant	
Unskilled Hours (last 4000)	160000	Relevant as casual	
Variable Overhead	150000	Relevant as variable	
Fixed Overheads - Central			
Apportionment	0	Irrelevant as non-incremental	
Fixed Overheads - Specific	20000	Relevant as incremental	
TOTAL RELEVANT COST	900000		
Add:20% Mark Up	180000		
RELEVANT COST QUOTATION	1080000		

Note:

From an examination technique perspective, it is essential that the reasons for treating costs and revenues as relevant or irrelevant should be clearly and succinctly explained.