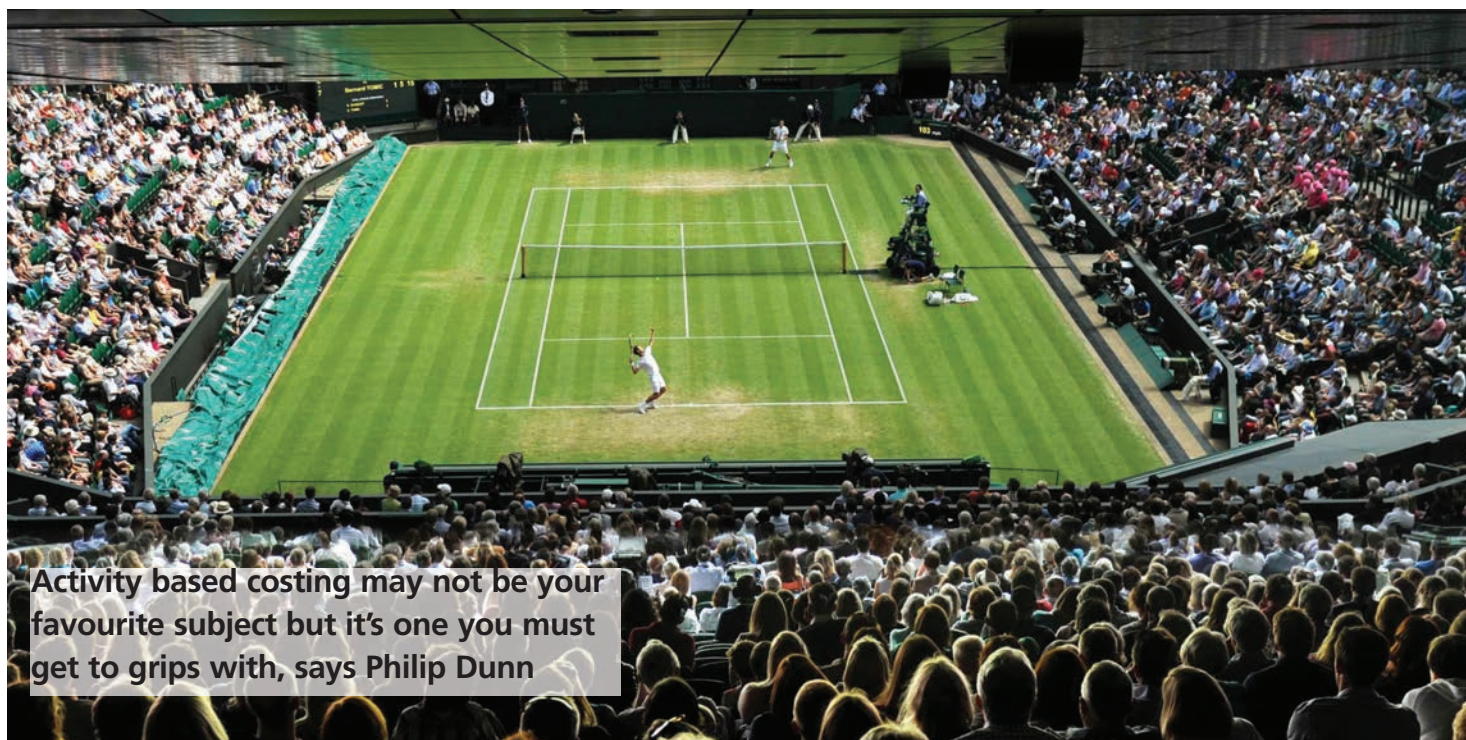


AN OVERHEAD VOLLEY



Activity based costing may not be your favourite subject but it's one you must get to grips with, says Philip Dunn

This short article will be of interest to AAT and ICB Level 4 students, those preparing for ACCA's F2 and F5 papers, together with CIMA and CIPFA trainees studying Management Accounting fundamentals.

Activity-based costing techniques re-examine the problem that has faced accountants for decades – that of the allocation and apportionment of overheads. Traditional methods of dealing with overheads involves allocation and apportionment of indirect cost to cost centres, from which overhead recovery/absorption rates are determined, usually based on direct labour hours or machine hours.

Such methods may be used successfully where there is a limited product range or a limited range of services rendered. However, in the more sophisticated businesses with flexible and rapidly changing product ranges, traditional techniques have proved less than adequate. Thus ABC offers a workable and more effective insight to overhead allocation and overhead recovery.

ABC has been defined by CIMA as 'cost attribution to cost units on the basis of benefit received from indirect activities'. Some would say that ABC is a relatively new technique; however research suggests that it was first used in the US in the 1960's.

As with other management accounting techniques ABC has its own terminology:

- Activity: 'a value adding process that consumes resources'.
- Cost Driver: 'an activity or factor that generates cost'.
- Cost Pool: 'pooling of overhead cost that relates to a specific activity'.
- Cost Driver Rate: 'the product of dividing the cost pool for the activity by the cost driver volume'.

ABC involves a set procedure:

- Accounting for and the collection of overhead.
- Allocation of overhead to form cost pools associated with value-adding activities.
- Identification of cost drivers.
- Determination of cost driver rates-cost pool divided by cost driver volume.
- Recovery of overhead based on cost driver rates and the demand for the activity.

This is illustrated in the example that follows. The example is far from exhaustive and aims to outline the principles of the technique.

Castout manufacture sea fishing rods. Its budget for the quarter ended 31 March 2018 showed:

Activity	Cost Pool £	Cost Driver Volume
Process (Machine) set up	80,000	250 set ups
Material procurement	20,000	120 purchase orders
Maintenance	25,500	10 maintenance plans
Material handling	40,500	5,000 material movements
Quality control	37,500	600 inspections
Order processing	25,000	600 customers

£ 228,500

Cost driver rates would be determined as:

£80,000/250	= £320 per set up
£20,000/120	= £166.67 per purchase order
£25,500/10	= £2,550 per maintenance plan
£40,500/5000	= £8.10 per material movement
£37,500/600	= £62.50 per quality inspection
£25,000/600	= £41.67 per customer

The business has a product, called Sea-fish Premier, and plans to produce 1,000 units of this product in the budget period. This output will require the following activity demand.

2 Set-ups
4 Purchase orders
1 standard maintenance plan
100 material movements
50 quality inspections
10 sales customers

Using ABC technique we find:

		£	£
Set ups	2 x	320.00	640.00
Material procurement	4 x	166.67	666.68
Maintenance	1 x	2,550.00	2,550.00
Material handling	100 x	8.10	810.00
Quality inspections	50 x	62.50	3,125.00
Order Processing	10 x	41.67	416.70
			<u>£ 8,208.38</u>

This shows, when associated with cost pools and identified to the activities that drive cost, the overhead cost per unit of output is
£8,208.38/1000 = £8.21

• Dr Philip E Dunn is a freelance author and technical editor for Kaplan and Osborne Books