

ACC2200- Tutorial 9- Relevant costs for decision making

Tutorial Questions: Chapter 19: 19.9, 19.14, 19.29, 19.36

Question 19.9

An opportunity cost is the potential benefit given up when the choice of one action precludes a different action. For example, one opportunity cost associated with getting a university education is the student's foregone wages from a job that might have been held during the educational period. Another example of an opportunity cost is profits foregone from producing and selling product A, when a production facility is used instead to produce product B.

People often ignore or downplay the importance of opportunity costs in decision making. Since an opportunity cost is often not an 'out-of-pocket' cost and is not measured within the business' accounting system, people tend to think it is less important than these costs that are recorded. This behavioural tendency can result in faulty decision making. By definition, an opportunity cost is something that does not or will not happen. Hence it is often overlooked.

To help students recognise opportunity costs that are not recorded in the accounting system in the immediate future (but sometimes become large lost benefits in the long term), it might be helpful to discuss the impact on their university results if a student spent the mid-semester break at the snowfields instead of catching up with academic work. These might include the cost and effort of repeating parts of the degree, worse exam results that later affect job hunting, later finishing of the degree and so on.

Question 19.14

The appropriate approach to making a decision to add or delete a department would involve identifying all relevant costs and benefits of adding or closing a

department. For example, there may be opportunity costs incurred if the department added results in losing revenue that could be earned from other uses of this floorspace.

This type of decision is often more strategic in nature, involving large increases or decreases in capacity-related resources, with long-term implications. In deciding whether to add or delete a department, incremental revenues and costs must be investigated thoroughly but if these revenues and costs relate to the longer term, it is also important to consider the time value of money.

Question 19.29

Dear Managing Director,

We recommend against processing banolide into kitroicide. The incremental cost of further processing, \$16 200, exceeds the incremental revenue, \$15 000. This \$15 000 incremental revenue is the difference between the sales value of the kitroicide, \$20 000, and the sales value of the banolide, \$5000. We would also like to point out that the cost of the joint process, \$40 000, and the allocation of that cost to the joint products is irrelevant to the decision.

Yours sincerely,

Pooja

Partner, Student Consulting Associates

Question 19.36

The analysis prepared by the Engineering, Manufacturing and Accounting Departments of Rockhampton Flow Technology (RFT) is not correct. However, their recommendation is correct. An incremental cost analysis similar to the

following table should have been prepared to determine whether the pump should be purchased or manufactured. In the following analysis, fixed factory overhead costs and general and administrative overhead costs have not been included because they are not relevant; these costs would not increase because no additional equipment, space or supervision would be required if the pumps were manufactured. Therefore, RFT should purchase the pumps because the purchase price of \$68 is less than the \$72 relevant cost to manufacture.

Learning curve effects may reduce the cost of production labour once the manufacturing process settles down. These savings would also reduce the associated variable overhead costs. There is insufficient information to estimate the effects of these potential savings but, given that there is only a \$4 per unit difference between the incremental costs to manufacture the pump and the purchase price and the current trend of increases in purchase price, RTF may decide to proceed with manufacturing the pump.

Incremental cost Analysis:

	Cost of 10,000 unit Assembly run	Per unit cost
Purchased components	\$120,000	\$12
Assembly Labour	\$300,000	\$30
Variable Manufacturing Overhead	\$300,000	\$30
Total Relevant Cost	<u>\$720,000</u>	<u>\$72</u>