

The Institute of Finance Management

Department Accounting and Finance

Tutorial Questions

Management Accounting

Targeting Costing

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QUESTION 1

Explain how target costing is different from cost plus pricing

QUESTION 2

Why is it important to manage costs before products have been produced?

QUESTION 3

At what stage of the product development cycle does target costing play a key role?

QUESTION 4

Explain how target costing is different from cost plus pricing

QUESTION 5

BM is the company that manufactures mobile phones. This market is extremely volatile and competitive and achieving adequate product profitability is extremely important. BM is a mature company that has been producing electronic equipment for many years and has all the costing systems in place that one would expect in such a company. These include a comprehensive overhead absorption system, annual budgets monthly variance reports and a balanced scorecard for performance. The company is considering introducing

- (a) Targeting costing
- (b) Life cycle costing system

REQUIRED

Discuss the advantages (or otherwise) that this specific company is likely to gain from these two systems

QUESTION 6

Target costing is the process of translating a customer's view of a product into an engineer's view of a product. Illustrate what this statement means when using a product. (Hint: Use a product you are familiar with such as a telephone, a watch, a radio, etc.)

A company is planning a new product. Market research information suggests that the product should sell 10,000 units at Shs.21.00/unit. The company seeks to make a mark-up of 40% of product cost. It is estimated that the lifetime costs of the product will be as follows:

1. Design and development costs Shs.50,000

2. Manufacturing costs Shs.10/unit
3. End of life costs Shs.20,000

The company estimates that if it were to spend an additional Shs. 15,000 on design, manufacturing costs/unit could be reduced.

REQUIRED:

- (a) What is the target cost of the product?
- (b) If the additional amount were spent on design, what is the maximum manufacturing cost per unit that could be tolerated if the company is to earn its required markup?

QUESTION 8

ABC Co assembles and sells many types of radio. It is considering extending its product range to include digital radios. These radios produce a better sound quality than traditional radios and have a large number of potential additional features not possible with the previous technologies (station scanning, more choice, one-touch tuning, station identification text and song identification text etc).

A radio is produced by assembly workers assembling a variety of components. Production overheads are currently absorbed into product costs on an assembly labour hour basis. ABC Co is considering a target costing approach for its new digital radio product.

REQUIRED

- a) Briefly describe the target costing process that ABC Co should undertake.
- b) Explain the benefits to ABC Co of adopting a target costing approach at such an early stage in the product development process.
- c) Assuming a cost gap was identified in the process, outline possible steps ABC Co could take to reduce this gap.

QUESTION 9

GM Co assembles and sells many types of car radios. It is considering extending its product range to include digital radios. These radios produce better sound quality than traditional radios and have a large number of potential additional features not possible with the previous technologies. A radio is produced by assembly workers assembling a variety of components. Production overhead costs are currently absorbed into product costs on an assembly labour hour basis. GM Co is considering a target costing approach for its new digital radio product.

The additional information on GM Co for radio production is given below:

A selling price of Shs 440,000 has been set in order to compete with a similar radio on the market that has comparable features to GM Co's intended product. The board has agreed that the acceptable margin (after allowing for all production costs) should be 20%. The cost information for the new radio is as follows:

Component 1 (Circuit board) – these are bought in and cost Shs 41,000 each. They are bought in batches of 4,000 and additional delivery costs are Shs 24,000,000 per batch.

Component 2 (Wiring) – in an ideal situation 25 cm of wiring is needed for each completed radio. However, there is some waste involved in the process as the wire is occasionally cut to the wrong

length or is damaged in the assembly process. Edward Co estimates that 2% of the purchased wire is lost in the assembly process. Wire costs Shs 5,000 per metre to buy. Other materials – other materials cost Shs 81,000 per radio. Assembly labour – these are skilled people who are difficult to recruit and retain. GM Co has more staff of this type than needed but is prepared to carry this extra cost in return for the security it gives the business. It takes 30 minutes to assemble a radio and the assembly workers are paid Shs 126,000 per hour. It is estimated that 10% of hours paid to the assembly workers is for idle time. Production Overheads – A recent historic cost analysis has revealed the following production overhead data:

	Month 1 (Shs)	Month 2 (Shs)
Total production overhead	6,200,000,000	7,000,000,000
Total assembly labour hours	19,000	23,000

Fixed production overheads are absorbed on an assembly-hour basis based on normal annual activity levels. In a typical year 240,000 assembly hours will be worked by GM Co.

REQUIRED:

- Briefly describe the target costing process that GM Co should undertake.
- Explain the benefits to GM Co of adopting a target costing approach at such an early stage in the product development process
- Assuming a cost gap was identified in the process, outline possible steps GM Co could take to reduce this gap.
- Using the information above calculate the expected cost per unit for the radio and identify any cost gap that might exist

QUESTION 10

Best Products Ltd has an aggressive research and development programme and uses target costing to aid in the final decision to release new products for production. A new product is being evaluated. Market research has surveyed the potential market for this product and believes that its unique features will generate a total demand of 50,000 units at an average price of Shs 2,300 per unit. The design and production engineering departments have performed a value analysis on the product and have determined that the total cost for the various value chain functions using the existing process technology are as follows.

Value chain function	Total cost over product life (Shs '000')
Research and development	15,000
Design	7,500
Manufacturing	50,000
Marketing	8,000
Distribution	14,000
Customer service	7,500
Total cost over product life	102,000

Management's target profit is set at 20% of sales. Production engineering indicates that new process technology can reduce the manufacturing cost by 40%, but it will cost Shs. 10,000,000.

REQUIRED:

- a) Target costing and value engineering are commonly adopted by manufacturing firms in new product development. Describe and explain the terms “target costing” and “value engineering”.
- b) Analyse and explain whether the new product should be released to production under the following two assumptions:
 - i. Existing process technology is used
 - ii. New process technology is purchased.