The Institute of Finance Management

Department Accounting and Finance

Lecture Notes

Management Accounting

Targeting Costing

Instructor: Dr Zawadi Ally

Learning Objectives

After studying this chapter, readers will be able to understand

- Explain what is meant by the term ‘target cost’
- Derive a target cost in manufacturing and service industries
- Explain the difficulties of using target costing in service industries
- Describe the target cost gap
- Suggest how a target cost gap might be closed

1.1 Introduction

Target costing is a technique which developed in the early 1970s in Japan's manufacturing industry as consumer demand for more diversified products and shorter product life cycles made the development and planning stages of new products more important. At the same time increased automation and decreased labour costs made standard costing less important as the main method of cost management within manufacturing companies.

It began with the recognition that customers were demanding more diversity in the products that they bought, and the life cycles of products were getting shorter. This meant that new products had to be designed more frequently to meet customer demands

A target cost involves setting 'a product cost estimate by subtracting a desired profit margin from a competitive market price. Sakurai (1989) defines target costing as a 'cost management tool for reducing the overall cost of a product over its entire life cycle with the help of the production, engineering, R&D, marketing, and accounting departments'.
A *target cost* is the allowable amount of cost that can be incurred on a product and still earn the required profit from that product

It important to manage costs before products have been produced because nearly 80% of the costs of many products are committed at the design stage. Therefore, the best opportunity to reduce costs is during design and not after a product is being manufactured.

Target costing occurs within the product development cycle. This means it starts when a product is in its concept stages and ends when a product has been released for manufacturing

Target Costing
Target costing involves setting a target cost **by subtracting a desired profit margin from** a **competitive market price**.

Target costing is **used mainly for new product development**. This is because whenever a new product is designed and developed for a competitive market, a company needs to know what the maximum cost of the new product must be so that it will sell at a profit.

1.2 The steps involve in deriving a target cost

There are a number of steps in the process of deriving target costing,

1. Estimate a selling price for a new product that considers how much competitors are charging and how much customers are willing to pay. This selling price will enable a firm to capture a required share of the market.
2. Reduce this figure by the firm's required level of profit.
3. Produce a target cost figure for product designers to meet.
4. Reduce costs to provide a product that meets that target cost

1.3 Steps in the implementation of the target costing process.

Step 1: Determine a product specification of which an adequate sales volume is estimated.

Step 2: Set a selling price at which the organization will be able to achieve a desired market share.

Step 3: Estimate the required profit based on return on sales or return on investment.

Step 4: Calculate the target cost = target selling price – target profit

Step 5: Compile an estimated cost for the product based on the anticipated design specification and current cost levels.

Step 6: Calculate **target cost gap** = estimated cost – target cost.

Step 7: Make efforts to close the gap. This is more likely to be successful if efforts are made to **design out** costs prior to production, **rather than** to **control out** costs during the production phase.

Step 8: Negotiate with the customer before making the decision about whether to go ahead with the project.

1.4 Closing the target cost gap

Once an overall target cost has been established for the product, it is necessary to identify the gap between the target cost and the estimate of the cost to build the product based on current processes, suppliers, productivity levels and materials. The gap gives an estimate of the excess cost which must be taken out of the new product.

It should be noted that, the target cost gap is established in step 4 of the target costing process. It is the difference between what an organization thinks it can currently make a product for, and what it needs to make it for, in order to make a required profit

Target cost gap = Estimated product cost – Target cost

Hence: The alternative product designs should be examined for potential areas of cost reduction that will not compromise the quality of the products.
This process is known as 'value analysis'. Attention should be focused more on reducing the costs of features perceived by the customer not to add value.

1.5 Key characteristics of successful target costing

- Target costing focuses on the customer: Customer requirements for quality, cost and time are incorporated into the product decisions and guide the analysis of costs.
- Emphasis on cost reduction at early stages in product development: Target costing starts at the earliest stage in new product development. This often means initial designs are simplified before manufacture, resulting in lower costs and time-to-market once the design is finalized.
- Consideration of the whole product life-cycle**:** In order to ensure that total costs are minimized for both the producer and the customer, successful target costing examines the full life-cycle cost of the product
- A multidisciplinary process**:** target costing is the multidisciplinary nature of the process and the importance of the involvement of all functions in the analysis and decision-making. Responsibility for achieving targets must also be shared across functions.

1.6 Target costing in service organizations

Target costing is as relevant to the service sector as the manufacturing sector. There are some ways in which target costing can be applied to service-oriented businesses. For service businesses the focus is the service delivery system. Although, the key issues – understanding the needs of the market, customers and users, and ensuring satisfactory financial performance at a given cost or price which does not exceed the target cost – remain.

1.6 Advantages of target costing

A primary reason why firms use target costing is to plan or project the costs of products before they are introduced, and to ensure that low-margin products are not introduced which do not bring sufficient returns

However, there are additional purposes for which companies have introduced target costing which vary from company to company which include the followings

- Target costing is more flexible than traditional standard costing, so targets can change/reduce from time to time
- Target costing takes into account the competitive market and the price customers are prepared to pay. Hence target costing focus on external rather than traditional standard costing focus on internal costs only
- Target costing is flexible for cost reduction and control while Standard costs are too rigid for cost reduction and control
- Targeting costing is used as a *cost reduction* technique, unlike standard costing, should incorporate a learning effect
- Target costing usually involves other techniques, such as value analysis and value engineering, which should simplify production methods and reduce costs
- Target costing is a tool which can be used to control decisions such as design specifications and production techniques
- Staff can be highly motivated by target costing if used correctly. It helps to break down any artificial functional barriers as staff at all levels and in all functions are involved
- To encourage a focus on the customer: Target costing is, by nature, market-driven. It therefore stimulates behaviour which is customer-focused and encourages all functions within the company to respond to market demand and competitive trends rather than internal performance indicators
- The discipline of target costing and the detailed review of costs can reveal more general managerial problems
- Targeting costing is a driver for cost improvement

1.7 Difference between target costing and cost plus pricing

Target Costing	**Cost Plus Pricing**
Competitive market considerations drive cost planning	Market considerations not part of cost planning
Prices determine costs.	Costs determine price.
Design is key to cost reduction	Waste and inefficiency is focus of cost

	reduction efforts
Customer input guides cost reduction	Cost reduction is not customer driven.
Supplier involved early.	Suppliers involved after product designed
Uses cross-functional teams to manage costs	Cost accountants are responsible for cost reduction.
Minimizes cost of ownership to customer	Minimizes initial price paid by customer.
Involves the value chain in cost planning.	Little or no involvement of value chain in cost planning

1,8 Comprehensive Example

A company has designed a new product. BXM. It currently estimates that in the current market, the product could be sold for Shs 700 per unit. A gross profit margin of at least 30% on the selling price would be required, to cover administration and marketing overheads and to make an acceptable level of profit.

A cost estimation study has produced the following estimate of production cost for BXM

Cost item	
Direct material X	Shs 90 per unit
Direct material Y	Each unit of product BXM will require three kgs of material X, but there will be loss in production of 10% of the material used. Material Y costs Shs 18 per kg..
Direct labour	Each unit of product BXM will require 0.50 hours of direct labour time. However it is expected that there will be unavoidable idle time equal to 5% of the total labour time paid for. Labour is paid Shs 190 per hour.
Production overheads	It is expected that production overheads will be absorbed into product costs at the rate of Shs 600 per direct labour hour, for each active hour worked. (Overheads are not absorbed into the cost of idle time.)

REQUIRED:

Calculate:

(a) The expected cost of Product BXM;
(b) The target cost for BXM;
(c) The size of the cost gap.

Solution:

(a) Expected cost per unit	Shs	Shs
Direct material X		90
Direct material Y: 3 kgs x 100/90 x shs 18		60
Direct labour: 0.5 hours x 100/95 x shs 190		100
Production overheads: 0.5 hours x Shs 600		300

Expected full cost per unit		550
(b) Target cost		
Sales price	700	
Minimum gross profit margin (30% x Shs 700)	(210)	
Target cost		490
(c) Cost gap		60

The company needs to identify ways of closing this cost gap.

1.9 Closing the Target Cost Gap

Target costs are rarely achievable immediately and ways must be found to reduce costs and close the cost gap

- To **re-design products** to make use of common processes and components that are already used in the manufacture of other products by the company.
- To discuss with key suppliers methods of **reducing materials costs**. Target costing involves the entire 'value chain' from original suppliers of raw materials to the customer for the end-product, and negotiations and collaborations with suppliers might be an appropriate method of finding important reductions in cost.
- To **eliminate non value-added activities or non-value added features** of the product design. Something is 'non-value added' if it fails to add anything of value for the customer. The cost of non-value-added product features or activities can therefore be saved without any loss of value for the customer. Value analysis may be used to systematically examine all aspects of a product cost to provide the product at the required quality at the lowest possible cost.
- To **train staff in more efficient techniques** and working methods. Improvements in efficiency will reduce costs.
- To **achieve economies of scale**. Producing in larger quantities will reduce unit costs because fixed overhead costs will be spread over a larger quantity of products. However, production in larger quantities is of no benefit unless sales demand can be increased by the same amount.
- To **achieve cost reductions as a result of the learning curve** or, more likely, the experience curve effect. The **learning curve** is **most likely to exist in a labour-intensive environment**. It results in cost savings as labour becomes more familiar with performing a new and complex task. The experience curve effect relates to cost savings made in costs other than labour costs as the company becomes more familiar with the production of a new product. For example, management of the process and marketing may become more efficient as the company gains experience of making and selling the product