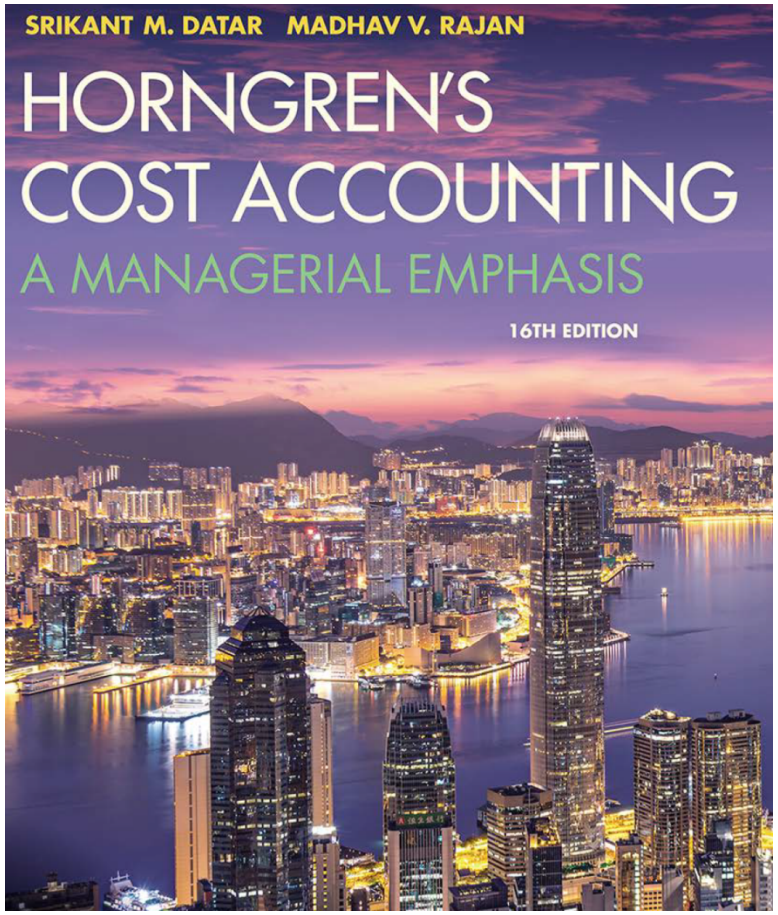
Cost Accounting

Sixteenth Edition



Chapter 13

Pricing Decisions
and
Cost Management

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Major Factors that Affect Pricing Decisions

- How companies price a product or service ultimately depends on the demand and supply for it.
- Three influences on demand and supply are:
  - Customers
  - Competitors
  - Costs

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Three Influences on Demand and Supply

1. Customers influence price through their effect on the demand for a product or service, based on factors such as product features and quality.
2. Competitors influence price through their technologies, plant capacities, and operating strategies which affect their costs.
3. Costs influence prices because they affect supply. The lower the cost of producing a product, the greater the quantity a firm is willing to supply.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Costing and Pricing For the Long-Run

- Short-run pricing decisions have a time horizon of less than one year and include decisions such as:
  - Pricing a one-time-only special order with no long-run implications
  - Adjusting product mix and output volume in a competitive market.
- Long-run pricing is a strategic decision designed to build long-run relationships with customers based on stable and predictable prices. Managers prefer a stable price because it reduces the need for continuous monitoring of prices, improves planning and builds long-run buyer–seller relationships.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Cost Allocation

- Recall that indirect costs of a particular cost object are costs that are related to that cost object but cannot be traced to it in an economically feasible (cost-effective) way.
- These costs often comprise a large percentage of the overall costs assigned to cost objects.
- Cost allocations and product profitability analyses affect the products promoted by a company. To increase profits, managers focus on high-margin products.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Purposes of Cost Allocation

Exhibit 13.1 Purposes of Cost Allocation

Purpose	Examples
1. To provide information for economic decisions	To decide on the selling price for a product or service To decide whether to add a new product feature
2. To motivate managers and other employees	To encourage the design of products that are simpler to manufacture or less costly to service To encourage sales representatives to emphasize high-margin products or services
3. To justify costs or compute reimbursement amounts	To cost products at a "fair" price, often required by law and government defense contracts To compute reimbursement for a consulting firm based on a percentage of the cost savings resulting from the implementation of its recommendations
4. To measure income and assets	To cost inventories for reporting to external parties To cost inventories for reporting to tax authorities

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Alternative Long-Run Pricing Approaches

How should managers use product cost information to price their products? There are two different approaches for pricing decisions:

- The MARKET-BASED APPROACH asks: Given what our customers want and how competitors will react to what we do, what price should we charge?
- The COST-BASED APPROACH asks: Given what it costs us to make this product, what price should we charge that will recoup our costs and achieve a target return on investment?

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Market-based Approach: Target Costing for Target Pricing (1 of 3)

Before setting prices under any approach, managers need to understand customers and competitors for three reasons:

1. Lower-cost competitors continually restrain prices.
2. Products have shorter lives, which leaves companies less time and opportunity to recover from pricing mistakes, loss of market share and loss of profitability.
3. Customers are more knowledgeable because they have easy access to price and other information online and demand high-quality products at low prices.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Market-based Approach: Target Costing for Target Pricing (2 of 3)

- Starts with a target price which is the estimated price for a product or service that potential customers are willing to pay
- The target price is estimated based on

1. An understanding of customers' perceived value for a product or service, and
2. How competitors will price competing products or services.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Market-based Approach: Target Costing for Target Pricing (3 of 3)

FOUR STEPS IN DEVELOPING TARGET PRICES AND TARGET COSTS

1. Develop a product that satisfies the needs of potential customers.
2. Choose a target price.
3. Derive a target cost per unit by subtracting target operating income per unit from the target price.
4. Perform value engineering to achieve target cost.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Value Engineering, Cost Incurrence, and Locked-in Costs (1 of 5)

VALUE ENGINEERING

- Value engineering is a systematic evaluation of all aspects of the value chain, with the objective of reducing costs and achieving a quality level that satisfies customers.
- Value engineering entails improvements in product designs, changes in materials specifications, and modifications in process methods.
- To implement value engineering, managers must distinguish *value-added* activities and costs from *non-value-added* activities and costs.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Value Engineering, Cost Incurrence, and Locked-in Costs (2 of 5)

VALUE ENGINEERING TERMINOLGY

- Value-added costs is a cost that, if eliminated, would reduce the actual or perceived value or utility (usefulness) customers experience from using the product or service.
- Non-value-added costs are costs that, if eliminated, would *not* reduce the actual or perceived value or utility (usefulness) customers gain from using the product or service. It is a cost the customer is unwilling to pay for.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Value Engineering, Cost Incurrence, and Locked-in Costs (3 of 5)

VALUE ENGINEERING TERMINOLGY

- Cost incurrence—describes when a resource is consumed (or benefit foregone) to meet a specific objective.
- Locked-in costs (designed-in costs)—are costs that have not yet been incurred but will be incurred in the future based on decisions that have already been made.
- The best opportunity to manage costs is before they are locked in.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Value Engineering, Cost Incurrence, and Locked-in Costs (5 of 5)

To summarize, the key steps in value-engineering are:

1. Understanding customer requirements and value-added and non-value added costs.
2. Anticipating how costs are locked in before they are incurred.
3. Using cross-functional teams to redesign products and processes to reduce costs while meeting customers needs.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Possible Undesirable Effects of Value Engineering and Target Costing

Unless managed properly, value engineering and target costing can have undesirable effects:

1. Employees may feel frustrated if they fail to attain targets.
2. The cross-functional team may add too many features just to accommodate the different wishes of team members.
3. A product may be in development for a long time as the team repeatedly evaluates alternative designs.
4. Organizational conflicts may develop as the burden of cutting costs falls unequally on different business functions in the company's value chain.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Avoiding Possible Undesirable Effects

To avoid those possible undesirable effects, target-costing efforts should always:

1. Encourage employee participation and celebrate small improvements toward achieving the target cost.
2. Focus on the customer.
3. Pay attention to schedules.
4. Set cost-cutting targets for all value-chain functions to encourage a culture of teamwork and cooperation.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Cost-plus Pricing (1 of 5)

Instead of using the market-based approach for long-run pricing decisions, managers sometimes use a cost-based approach.

- The general formula for setting a cost-based selling price adds a markup component to the cost base.
- Usually, it is only a starting point in the price-setting process.
- Markup is somewhat flexible, based partially on customers and competitors.
- Because a markup is added, cost-based pricing is often called cost-plus pricing, where the plus refers to the markup component.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Cost-plus Pricing (2 of 5)

Cost-plus pricing can be determined several ways:

- Choose a markup to earn a target rate of return on investment, which is the target annual operating income divided by invested capital
- Computing the specific amount of capital invested in a product is challenging because it requires difficult and arbitrary allocations of investments in equipment and buildings to individual products.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Cost-plus Pricing (3 of 5)

- Because computing the specific amount of capital invested in a product is challenging, sometimes managers use alternate cost bases to set prospective selling prices:
  - Variable manufacturing cost
  - Variable cost
  - Manufacturing cost
  - Full cost

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

COST-PLUS PRICING (4 of 5)

COMMON BUSINESS PRACTICE:

Many managers use full cost for their cost-based pricing decisions because:

- It allows for full recovery of all costs of the product.
- It allows for price stability.
- It is a simple approach.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Cost-plus Pricing (5 of 5)

- The selling prices computed under cost-plus pricing are prospective prices.
- The target-pricing approach reduces the need to go back and forth among prospective cost-plus prices, customer reactions, and design modifications.
- Target-pricing first determines product characteristics and target price on the basis of customer preferences and expected competitor responses and then computes a target cost.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Life-cycle Product Budgeting and Costing

- Managers sometimes need to consider target prices and target costs over a multiple-year product life cycle.
- Product life cycle spans the time from initial R&D on a product to when customer service and support are no longer offered on that product.
- In life-cycle budgeting, managers estimate the revenues and business function costs across the entire value-chain from its initial R&D to its final customer service and support.
- Life-cycle costing tracks and accumulates business function costs across the entire value chain from a product's initial R&D to its final customer service and support.
- Life-cycle budgeting and life-cycle costing span several years.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Life-cycle Budgeting and Pricing Decisions

Budgeted life-cycle costs provide useful information for strategically evaluating pricing decisions. These two features of costs make life-cycle budgeting particularly important.

- The development period for R&D and design is long and costly.
- Many costs are locked in at the R&D and design stages, even if R&D and design costs are themselves small.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Managing Environmental and Sustainability Costs

Managing environmental costs is a critical area where managers apply life-cycle costing and value engineering.

Environmental costs that are incurred over several years of the product's life cycle are often locked in at the product- and process-design stage.

A new organization, the Sustainability Accounting Standards Board (SASB) has begun defining standards for environmental, social, and governance (ESG) performance for different industries. When measured over multiple periods, companies that have higher relevant ESG ratings have higher future profitability and financial performance, perhaps because of customer loyalty and satisfaction, employee engagement, or brand and reputation.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Customer Life-cycle Costing

Customer life-cycle costs focus on the total costs incurred by a customer to acquires, use, maintain, and dispose of a product or service.

These costs influence the prices a company can charge for its products.

As an example, Maytag can charge higher prices for appliances that save electricity and have low maintenance costs.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Non-cost Factors in Pricing Decisions

- Price discrimination is the practice of charging different customers different prices for the same product or service.
  - Legal implications
- Peak-load pricing is the practice of charging a higher price for the same product or service when demand approaches the physical limit of the capacity to produce that product or service.
- International price differences arise because of differences in the purchasing power of consumers in different countries and government restrictions that may limit the prices that companies can charge.

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.

Antitrust Laws and Pricing Decisions

Legal considerations also affect pricing decisions. Two key features of price-discrimination laws are:

1. Price discrimination is permissible if differences in prices can be justified by differences in costs.
2. The price discrimination is illegal only if the intent is to lessen or prevent competition.

Additional legal issues include:

- Predatory pricing
- The “appropriate measure of costs”
- Dumping
- Collusive Pricing

Pearson

Copyright © 2018, 2016, 2015 Pearson Education, Inc. All Rights Reserved.