# Product Pricing is Based on Cost from An Accountant's Perspective. 

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#### Abstract

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Cost-based pricing with a markup refers to the information the cost system provides for pricing decisions. This method uses product costs as a foundation to set a price point. The markup is calculated to cover not only the product costs but also to ensure a profit margin. According to the author, it's crucial to understand that selling prices must always be sufficient to cover all production, management, and distribution costs, including both variable and fixed costs, as well as provide a reasonable return on shareholders' investments if a business aims to survive and grow.


Keywords: product, pricing based on cost, accounting

## 1. Introduction

Ray H. Garrison (1991), the decision on pricing products and services is considered the most crucial one that a manager has to make. Pricing decisions are not just marketing or financial choices; they impact every activity within a company. The price set for a product determines the volume of customers willing to purchase it and also affects the company's revenue stream. If the income isn't enough to cover costs, then even if expenses are tightly controlled and managers are creative in their job execution, there will still be an impact. According to Mowen (2009), demand is one side of the pricing equation, and supply is the other. Revenue must cover costs to generate profit, so many businesses start with costs when setting prices. This means calculating the cost of the product and adding a desired profit margin, usually based on basic costs plus an additional amount. This method involves calculating the base cost and then adding an estimated extra amount to achieve the target selling price. The flexibility of this pricing model depends on the cost structure of the base cost method and the additional amount. The base cost could be a full cost or a variable cost. The markup percentage varies for different products depending on the environment, competitive position, and product demand. The additional amount is calculated based on two factors: what basis it's added upon and what level of profit is acceptable. The simplest and most widely used method to calculate markup is based on a percentage of costs. Additionally, markup can be calculated based on a percentage of invested capital. The second issue is how much profit is acceptable. The profit information they provide will have an impact on senior managers' perceptions of financial reports from profit centers. Therefore, the acceptable profit level should be close to the return rate that could be achieved if the business units were independent entities selling products to customers.

## 2. Factors influencing product pricing in manufacturing businesses

## Competition in the business environment

The new competitive environment has increased demand not only for more cost information but also for accurate cost details. This information plays a crucial role in reducing expenses, boosting productivity, and assessing profits. As competition intensifies, managers in this industry become more aware of the necessity for precise cost information to aid in planning, control, continuous improvement, and decision-making. Consequently, changes in the competitive landscape heighten the need for creativity and appropriateness in cost management methods. Guiding argues that as the business environment grows more competitive, cost information becomes increasingly vital. Costs must be calculated accurately to determine the lowest price a company can afford to offer. Pricing higher than competitors can strip a company of its competitive edge if products are undifferentiated. If a company's product features new enhancements to meet customer needs and add value, it must consider the additional costs incurred by introducing these new features. The price and quality of competing products become critical to the survival of a product line. That's why market-condition-based pricing strategies are gaining an edge over cost-based ones. This is particularly true in cutthroat environments where products may need to compete more on price. Therefore, in highly competitive markets, especially when a company's products aren't distinct from those of competitors, with the goal of market dominance, competitor information becomes more crucial than cost details.

## Market share

Companies with larger market shares often require more resources to invest in complex managerial accounting methods. This is because a more intricate environment is needed to handle a high volume of activities across a diverse range, necessitating sophisticated cost methods to accurately determine
indirect costs for products. Developing a cost accounting method is essential for establishing and maintaining a larger market share. Companies with smaller market shares tend to operate in niche areas where products may be customized according to customer demands. Therefore, they can focus more on the importance of cost-plus pricing. Gorden and colleagues (1981) noted that companies aiming to penetrate the market to maximize their share tend to price based on market factors rather than costs. Hence, businesses with smaller market shares pay more attention to the significance of cost-plus pricing. The lower the market share, the greater the importance of cost-plus pricing methods becomes, leading to the following hypothesis:

## Business scale

When considering the relationship between business size and pricing, cost-based pricing is only suitable for price-setting businesses, primarily largescale enterprises with differentiated products. Large businesses often dominate the market and have the ability to set prices for it, using cost information effectively for pricing. Furthermore, as Guiding (2005) notes, large enterprises have the resources to develop modern cost methodologies that serve efficient cost-based pricing. In contrast, small businesses are typically price-takers; they tend to set their selling prices based on market value.

## Business strategy

Business strategy is all about how a company competes in its market to gain an edge over its rivals. Garrison, Noreen, and Brewer (2010) identified three major business strategies: customer intimacy-understanding and meeting customer needs; operational excellence-delivering products fastest at the lowest cost; and product leadership-offering the highest quality products. Companies opting for a low-cost strategy often require large-scale production, aiming to reduce expenses through experience or by controlling fixed costs. Full-costing methods are sufficient to provide cost information for these businesses. However, when a company pursues a quality leadership strategy, it can't ignore costs. Such a company needs an accurate product cost reporting method to pinpoint the higher profits generated from premium-priced products combined with a quality strategy. Hughes and Gjerde (2003) argued that product differentiation can soften competitive pricing in the market, but it's an expensive strategy to chase. Therefore, in markets where products are distinct from similar offerings, cost-plus pricing becomes crucial in setting prices that ensure revenues from differentiated products or services exceed the costs incurred to create that uniqueness. Moreover, if the products are different from those of competitors, competitive-based pricing won't provide businesses with the necessary price range information. Hence, when there's high product differentiation, competitive-based pricing is weak. In such cases, the importance of cost-based pricing is heightened. Cost information

Kotler (2000), cost is considered crucial for establishing price levels. Companies aim to set prices that cover all expenses: production, distribution, and a reasonable profit margin. Therefore, managers should monitor costs closely because if they exceed those of competitors, the company will earn lower profits and be at a competitive disadvantage. Blois and colleagues (2000) argue that cost knowledge is a vital input for pricing, with companies where cost information dominates pricing decisions finding it significantly important, whereas it's less critical for firms that set prices based on market conditions. It can be said that these companies rely heavily on cost data; hence, they use cost information over market data to make pricing decisions. This underscores the significant reliance on cost-plus pricing methods depending on cost information.

## Product customization level as per the customer's request.

Gordon and associates (1981) suggest that companies producing custom-made products for their customers rely more on cost-plus pricing methods than determining prices based on market factors. Drury (2004) argues that businesses offering bespoke products to their customers will compel them to accept a price set based on cost-plus, as there is no market price for such unique items. Guilding and colleagues (2005) contend that products or services tailored to specific customer needs result in higher prices, thereby increasing the significance of cost-plus pricing methods. Hence, the greater the demand for customer-specific products, the more important cost-plus pricing becomes. A company's product can be single, multiple, simple, or complex. Product characteristics affect production costs; therefore, cost-based pricing must consider the complexity and diversity of the product. Complex products consist of many intricate parts, require high technical precision, and involve various manufacturing processes and steps. The more complex a product is, the more machinery and specialized tools are needed, making it challenging to specialize workspaces and enhance production types.

The impact of setting the selling price.
In a competitive market, a few large companies emerge as price setters (market leaders), while many smaller firms become price takers, having to accept prices determined by the market. Consequently, for companies that accept prices, cost information isn't used to set selling prices; instead, prices are established based on market rates. Gordon and colleagues (1981) pointed out that price followers are more concerned with market conditions than costs compared to price setters. Guilding and Associates (2005) also argued that for companies producing undifferentiated products as price takers, cost information loses its value in determining selling prices.

## 3. Cost-based product pricing methods in manufacturing businesses.

## Pricing is based on variable costs plus a markup.

Garrison (1991) calculated the base cost as encompassing all variable costs, including both production and selling, as well as business management variations. Fixed-cost elements are not factored into the base cost, so the additional amount must cover fixed costs and generate a satisfactory profit. According to Drury (2004), in the short term, when a company has excess capacity, incremental information consists of revenue and direct material costs. Direct labor and general production costs typically remain unchanged, thus irrelevant for short-term decision-making. In pricing decisions, incremental cost represents the expense used as key information to set sale prices. Short-term incremental costs include direct material expenses. Generally, companies choose a time frame long enough for all variable costs to be included in incremental costs for product manufacturing. Terms like variable costing or
contribution margin pricing are usually defined to describe prices in the short term. From this analysis, the author suggests this method is useful when a company can't sell any more products in the market but existing revenues already cover fixed costs. If there's idle capacity, the company will strive to sell in other markets at lower prices but still above incremental costs. The contribution margin generated offsets fixed costs, and profits increase.

## Price based on full cost plus a markup.

Garrison (1991) emphasized that, when fully accounted for, base cost is defined as the cost to produce one unit of product. Selling and administrative expenses are not included in the base cost but are considered in the additional markup. Therefore, the markup must be substantial enough to cover these costs and generate a satisfactory profit margin for the company. Shim and Sudit's research found that $70 \%$ of surveyed companies use full-cost pricing, $12 \%$ use variable-cost pricing, and only $18 \%$ rely on market-based pricing. Drury and colleagues have indicated that cost information is used "flexibly." Cooper and Kaplan (1988) argue that there are two main reasons for using full costing as a basis for pricing decisions. First, it has been long established, and full-cost pricing provides a safeguard against undercutting prices. Second, managers feel that variable costs do not reflect the different product demands on various fixed resources.

## Pricing is based on the full-cost ABC method.

Kaplan (1990) emphasized that most pricing and other decisions affect a company's long-term capabilities, and, as a result, these decisions should be based on long-term rather than short-term cost coverage. In practice, many recent studies in management accounting have focused on designing cost accounting methods that provide more accurate product costs. Numerous researchers have recommended that businesses adopt activity-based costing (ABC) to provide more precise product costs for decision-making. Shim and Sudit (1995) explained the reasons for continuing to use full-cost pricing. According to them, the increased implementation of the ABC method is likely to rationalize the allocation of fixed costs, making these costs appear variable or semi-variable. Additionally, the ABC method enhances the identification of fixed costs for a specific product, leading to better cost allocation. They concluded that the ABC method offers a more accurate estimate of product cost, which is the basis for determining full-cost pricing. The use of the ABC method tends to support the widespread use of full-cost pricing in practice. Drury (2009) argued that activity-based methods measure all organizational resources required to produce a product and calculate the average long-term product cost. This method calculates long-term product costs more accurately than full-costing. Therefore, ABC method costs should be used for long-term pricing decisions and variable costing to determine incremental costs for short-term pricing decisions.

## Target cost for pricing the goal

An important form of pricing in management accounting is the use of target costing based on target prices. This approach is mainly applicable to companies that have the power to set the selling price (a price-setting firm), but the method can be improved to apply to price-receiving companies. Target costing was introduced in 1960 and originated in Japanese cost management. Since then, target costing has developed and become more commonly used. According to Mowen, American companies are starting to use cost targeting. Retail stores use target pricing when they look for items that can be sold at a specific price to attract customers. Simply explained, a target price is the estimated price for a potential product (or service) that customers will be willing to pay. This estimate is based on understanding the customer's perceived value of the product and the competitor's response based on marketing factors and pricing strategies. After determining the target selling price, the standard or desired profit margin is subtracted to get the target cost. There are several methods for setting target prices. Japanese companies use four important determinants when setting a product target price: customer demand, which is related to the physical features of the product; acceptable price; product features compared to competitors; and finally, establishing a price that will capture the desired market share or even more.

Set a target price based on the highest estimated prices that managers predict future customers will be willing to pay for the product, its unique value compared to competing products, and the price of those competitors. The target profit margin depends on the reinvestment plans for organizations as a whole and profit as a percentage of revenue. Subtract the target profit margin from the product's target price to determine the target cost (the maximum allowable cost for the products).

The second phase of the target costing method involves comparing the target costs with the actual costs. If the actual costs are higher than the target, three core methods or tools can be used to bridge the gap between the actual and target costs. These methods include value engineering, Kaizen costing (continuous improvement), and cost analysis and estimation. Since a company's prices and revenues must recover all its costs in the long run, all costs, including variable and fixed, should be included in target cost calculations. Drury (2009) suggests using target costing for setting prices for large volumes of product consumption. According to Drury, it's also a crucial mechanism for future product cost management.

So, when the target costing approach is used, the market price determines the product cost, and cost-plus pricing is not utilized. Although calculating the cost of a new product will highlight the target cost, this target cost is essential information for product decision-making. In cost-based pricing, costs are calculated first, and a markup percentage is added to determine the selling price. Meanwhile, target pricing is derived from the competitor's target price and adjusted according to demand. Target pricing avoids the issue of overlooking demand when setting prices, which is a characteristic of cost-based pricing.

## 4. Conclusion

Pricing is based on an understanding of costs, setting a price high enough to turn a profit yet low enough to make sales happen. Using costs to price is a quick, simple, and essential method. Costs are the starting point for pricing, and they represent the lowest limit that prices cannot dip below in the long
run. Cost information is crucial, though that doesn't mean it's the only information that should be used when deciding on the final price. Therefore, managers should use this information, along with their market knowledge and pricing strategies, before setting the final price.

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