



## V I E W P O I N T

---

### **Pricing**

**Market Based Pricing  
In Complex Environments**

## Pricing Challenge:

Implementing an effective approach for continuous pricing of products in an organization with thousands of manufactured and sourced components, often bundled with other products or services, and in a multi-channel environment can be an overwhelming challenge.

---

## Pricing Challenges

---

Knowing how to optimally price products and services without leaving money on the table or hurting market share is a challenge for most organizations. Implementing an effective approach for continuous pricing of products in an organization with thousands of manufactured and sourced components, often bundled with other products or services, and in a multi-channel environment can be an overwhelming challenge. In addition, many other dimensions add to pricing complexity:

- Customers' perceived value of products and features relative to competition
- Substitute products and level of commoditization
- Stage in product life cycle
- Organization's overall goals

While marketing or product managers often set prices, the sales force usually has authority to discount products in the field. In addition, national contracts are often established with large customers further complicating the pricing process. Determining appropriate pricing strategy typically triggers a series of questions:

- Are we priced optimally?
- How should price vary across products and channels?

- How do customers compare my products relative to competition?
- What methodology is most effective to determine optimal pricing level on an ongoing basis?

Answering these questions can often become very difficult in complex environments such as those described above – however the payoff from getting it right can have a large impact on bottom line performance.

---

## Pricing Analysis

---

To improve pricing performance and profitability in multi-dimensional environments like these, it is necessary to implement a common pricing methodology across the organization's units, channels, and geographies. The pricing methodology will need to address how thousands of products are priced on a continuous basis and be tailored to the company's organizational structure and channels. Traditional pricing theories are typically not adequate to address this challenge – several pricing concepts are often combined to arrive at an optimal pricing methodology. Let's first start by discussing what we mean by pricing and review a few pricing concepts.

## Price Optimization

Classical micro economic theory says that the price point that optimizes the area under the demand curve generates the largest amount of revenue (Exhibit 1). The demand

## Value Based Pricing:

Understanding how products can be priced more profitably can be done using value based pricing; a concept that price should be set based on the perceived value to the customer rather than on the cost of making the product.

curve is the curve that defines the relationship between the price of the product and the quantity the customers are willing to purchase. We will define optimal price as maximizing the long term profit and revenue for a given product.

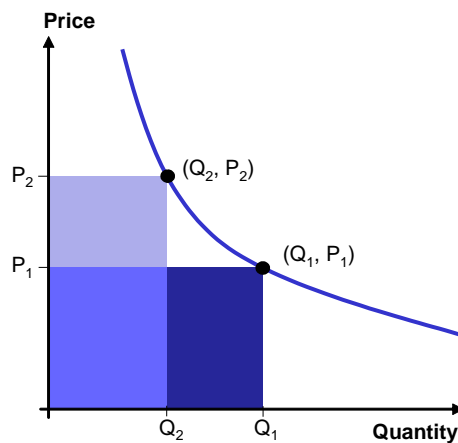


Exhibit 1: Classical demand curve

## Value Based Pricing

Pricing is not about raising or lowering price but rather about getting the price “right.” When determining the “right” price, the fundamental concept is that customers buy based on value, i.e. the difference between the benefits they receive from the product or service they buy and the price they pay. When customers compare products or services, it is really the perceived value that they compare and any effective pricing model must take this into consideration.

Many companies utilize a cost plus pricing approach where a set margin is added to the product or service cost. This is in particular prevalent in manufacturing companies. For more than a decade, many

leading organizations have applied a market or value based pricing approach. The basic philosophy of value based pricing is that price should be set based on the perceived value to the customer, not based on the cost of making the product or delivering the service. The approach involves understanding how customers determine value, then evaluating the customers’ perceived value and aligning price accordingly. It starts by understanding the non-price key buying factors or attributes. Data is collected on how customers weigh each attribute as well as their satisfaction. Performance level is determined relative to comparable competitive products to understand opportunities to optimize prices. There are many different tools that marketers can apply to quantify perceived value of products, two of which are conjoint analysis and discrete choice analysis. Some companies use market knowledge of product managers and the field to quantify attributes of their products and competitive products.

Different techniques are usually used to answer fundamental pricing questions:

- Is the price optimal relative to competition? (Technique: value mapping)
- Do we have unnecessary price variation? (Technique: discount variability analysis)
- What are the major discount types and are they reasonable? (Technique:

discount waterfall analysis)

- How does customer profitability vary by size? (Technique: customer profitability analysis)

In terms of priority, the value based mapping or pricing analysis is usually the most important to address. Each technique is discussed below.

### Value Mapping

When trying to understand whether products and services can be priced more profitably, value mapping is one of the first tools to apply. It is often useful to plot the results of perceived benefits (x-axis) to the customer against price (y-axis) on a chart, called value map, for the company's offerings versus competition (Exhibit 2). The diagonal is the line where customers perceive the break-even point where they feel they get their money's worth.

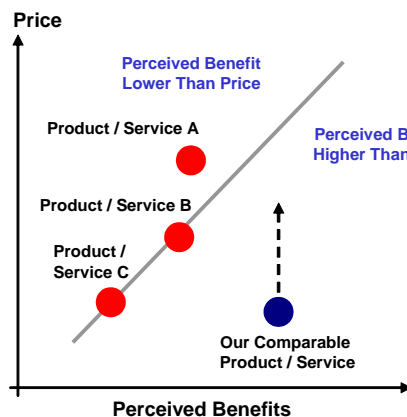


Exhibit 2: Value Map

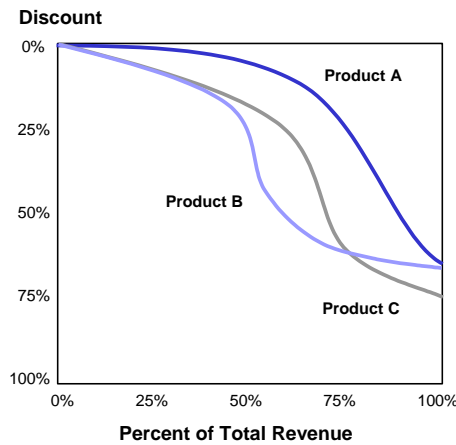
Using a value map, one gets a picture of whether products and services are

overvalued or undervalued vis-à-vis competition. This can be a very powerful tool to help understand how products and services can be priced more optimally.

There are reasons to be north or south of the diagonal line – perhaps share gain is desired and therefore pricing is set consciously below this line to drive disproportionate purchasing behavior. Conversely, a product may be at the end of its lifecycle and migration to a new product is the goal – in this case, the price may be set above the line to drive purchasing behavior towards the new alternative. Supplemental services can be added to the core offering that will move the offering to the appropriate point on the diagonal. Another strategy would be to remove aspects of the service the customer doesn't value and re-price accordingly.

### Discount Variability Analysis

Another effective diagnostic tool, namely discount variability analysis, helps companies understand if there may be a significant opportunity to better manage discounts. One benefit of this analysis is that it uses company transactional data and doesn't require customer or field input. To perform this analysis with actual transaction data, the discount (in percent) is plotted on the y-axis against percentage of total order revenue on the x-axis (Exhibit 3). The chart will show how prevalent discounting is, whether it occurs for high volume orders or across the board, and to what extent products are discounted.



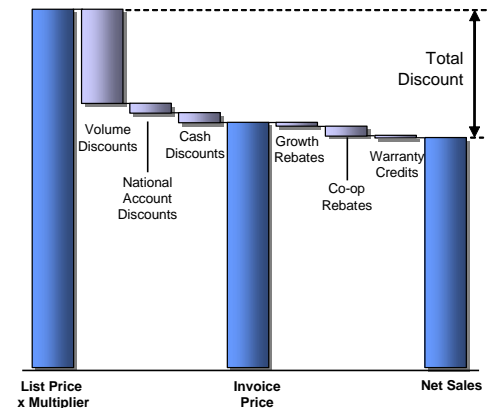
**Exhibit 3: Discount variability analysis**

For example, at one client, we saw more than 30% of invoices discounted above and beyond volume discounts. And, in one channel, more than 10% of items had a price variance of more than 50% between the highest and lowest price points. Both of these opportunities trigger areas to investigate and potentially capture additional margin in the future by eliminating unnecessary discounting. Discount variability analyses can be done by channel, product and territory to understand variations and opportunities across multiple dimensions.

**Discount Waterfall Analysis**

Managing discounts and rebates can require many resources and can, therefore, be costly. Yet some discounts may only have a small impact on overall sales. The discount waterfall analysis (Exhibit 4) helps illuminate where the major discounts occur and therefore potential areas to place focus to ensure that these discounts are driving desired purchasing behavior. Examples of

discounts often seen, depending on industry, include: volume discounts, cash discounts, national account discounts, co-op marketing rebates, growth rebates and warranty credits. The waterfall analysis starts with the list price (often a multiplier is applied on the list price). Discounts by type are then subtracted to arrive at the invoice price. Additional discounts and back-end rebates are then subtracted from the invoice price to arrive at the final net sales price. The amount of discount varies by industry but it is not unusual to see net sales at 20-30% lower than the list price. Knowing the composition of discounts allows management to discuss particular types of discounts and determine whether they are reasonable and if they are driving appropriate customer buying behavior.



**Exhibit 4: Discount waterfall analysis**

Not all customers will have the same discounts – different channels have different discounts and some customers may qualify for a particular level of discount. The waterfall analysis is usually done at an aggregate level but it can also be done at a customer level to understand customer

variability. A different approach to look at performance by account is described in the next section.

### Customer Profitability Analysis

Understanding how profitability varies by customer and size can lead to additional opportunities. When plotting account net revenue on the x-axis and profitability on the y-axis (Exhibit 5), it is often expected to see account profitability decline with account size (e.g. due to volume discounts). The graph allows us to identify outliers, i.e. accounts that seem to have much lower profitability for accounts of similar sizes. Knowledge of lower than expected profitability accounts allows management to address discounts and pricing on an account-by-account basis, often with quick results.

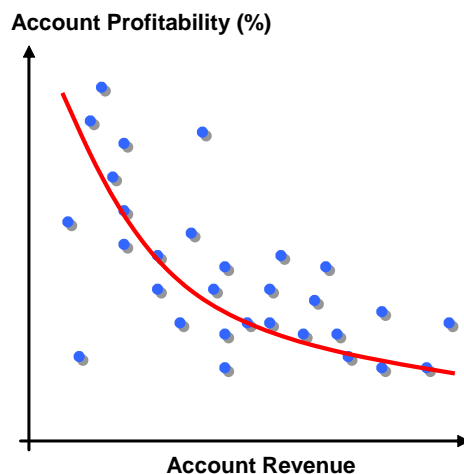


Exhibit 5: Customer profitability analysis

### Other Pricing Factors

Other opportunities to customize price based on elements of value delivered are

product differentiation, service differentiation, transaction costs, viable alternatives, switching costs and geography. Product and service differentiation highlights the varying value in attributes as there may be some attributes for which a customer is willing to pay more for. With product and service variations, the customer can self-select into the right price and product. Examples of service differentiation include, technical service, delivery time, or inventory management capability that some customers may find highly valuable. For specific products and services there may be some geography and availability constraints that the company overcomes for which the customer is willing to pay more. An example of a geography and availability constraint is when a product or service is available only at certain specialty shops. There may not be substitutes available to the customer. As with geography and availability there are some types of transactions that deliver greater value to the customer i.e. EDI, vendor managed inventory, expedited delivery, etc. The above factors illustrate that there are many levers that can be utilized to arrive at the right price for a particular service or product for the right customer.

### Parker Hannifin Corp.

Parker Hannifin Corp., an industrial-parts manufacturer, applied cost plus pricing to its 800,000 parts<sup>1</sup> before setting out on a focused strategy to implement value based pricing. When analyzing their products, they discovered that a third of all parts fell into a certain niche with no or limited competition.

<sup>1</sup> "Changing the Formula, Seeking Perfect Prices, CEO Tears Up the Rules," Wall Street Journal, March 27, 2001

They then studied a sample of 2,000 items and found that 28% of parts were priced too low. After applying a strategic pricing scheme based on customers' willingness to pay (rather than cost plus pricing), the company's net income rose from \$130 million in 2002 to \$673 million in 2006, with a commensurate 86% increase in stock price.

Parker Hannifin Corp., an industrial-parts manufacturer, found that 28% of parts were priced too low. By optimizing their pricing, they were able to boost share price by 86% in four years.

### **Illustrative Case: Company ABC's Pricing Challenge**

With more than 20,000 products sold through a multitude of channels, one manufacturing company believed they needed external expertise and reached out to Gillum Strategy Partners for support. Like many other organizations, the company faced several familiar pricing challenges. They did not have a consistent methodology to evaluate and price new and existing products. Product managers were responsible for setting prices for their own product categories but each person tended to use a different approach. As is common in many manufacturing companies, most people applied some form of cost plus pricing. Some people tried to incorporate market related information – a few of the client's product managers gathered information from the field on competitors' pricing levels, however, most people did not incorporate specific competitive data. Gillum Strategy Partners helped this client to develop an optimal pricing methodology based on their unique situation. The model incorporated several theories of value based pricing and took into account competitors'

pricing levels, historical pricing trends, channels, position in the product life cycle and whether or not products are proprietary. As a result, the client was able to raise prices on a large number of products with a dramatic impact on profit.

---

### **Developing A Pricing Methodology**

---

There is sometimes a tradeoff between developing an optimal pricing methodology and making it easy to use. Challenges often encountered include:

- Difficulty comparing prices on configured or bundled products
- Lack of sources for information such as competitive pricing data
- Time required to gather information
- Ability to continuously update prices
- Lack of exposure to market and therefore difficulty valuing features and benefits

To manage these challenges, it is important to involve people across functions when developing the methodology. In the earlier client example, product managers were involved throughout the process to ensure that it was user friendly, accurate and applicable across all product lines. A test of the pricing model was conducted in which each product manager was asked to apply the model on five of their high volume

### **Pricing Payoff:**

Pricing is one of the most effective ways for executives to improve profitability, often 2-10 times the profit impact of cost improvement initiatives.

products. This enabled refinement of the pricing model so that it became more accurate and aligned with user needs before it was launched. The test also helped us estimate how much time and how many resources would be required to apply the pricing methodology across all major products on a continuous basis.

---

### **Pricing Payoff**

---

Determining optimal price relative to competition on a continuous basis is vital to improving profitability in any organization. Pricing is one of the most effective ways for executives to improve profitability, often 2–10 times the profit impact of cost improvement initiatives. After all, one dollar to the top line (from price changes) falls directly to the bottom line. The profit opportunity from optimally pricing products and services is too large to ignore, and well worth the effort to pursue.



**Gillum Strategy Partners** (GSP) is a boutique strategic consulting firm providing services to top tier clients in a broad base of industries, including technology, manufacturing and services. GSP's areas of expertise include go-to-market strategies, marketing effectiveness, channel and alliance management, growth strategies, sales productivity and operational improvement. We emphasize pragmatic solutions with measurable results and often work with our clients through implementation.

**Address:**

455 North Cityfront Plaza Drive  
Suite 3100  
Chicago, Illinois 60611

**Contact:**

Brad Gillum  
Managing Partner  
312.961.1441  
brad.gillum@gillumstrategy.com

© 2018, Gillum Strategy Partners. All rights reserved. No part of this work may be reproduced in any form without written permission from the copyright holder.