# Marketing That Works: How Entrepreneurial Marketing Can Add Sustainable Value to Any Sized Company 

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# Chapter 3. Entrepreneurial Pricing-An OftenMisused Way to Garner Extraordinary Profits 

Products/Services Equity/Shares Image<br>Customers

Users
Investors
Supply Chain/Channel Partners
Employees

## Pricing

Pricing is typically the most difficult marketing decision for most firms. It is also probably the most important because it ultimately determines how much money a company can make. In today's world, you not only have to price products that have significant manufacturing costs, or services with large human elements in delivery, but also intellectual property that can be replicated for essentially zero cost on the Internet. Unfortunately, some managers think pricing is much too easy. They use very comfortable, precise rules for pricing. These simple rules are usually one of two types: mark-up rules or competitive matching rules. Mark-up rules just take the product or service's costs and mark them up by a margin percentage. This margin percentage may be standard for the industry, or related to what you are used to, or what you need to make your forecasted profit at the forecasted revenue for your venture. The competitive rules usually have the manager planning on pricing just a bit lower than competition, or matching their prices. These "rules" make it very easy to make the pricing decision without having to do much work or careful thinking. However, like many things in life, "no pain, no gain." The problem with these "rules" is that they may leave lots of money on the table.

Why do these common ways of pricing leave lots of money on the table? Very simply, because other prices may be more profitable to the venture. For example, if my widgets cost $\$ 1$, and I sell them for \$2, a "keystone" or doubling mark-up, why shouldn't I as an entrepreneurial marketer be happy? You shouldn't because you haven't asked the proper question. The right question is: Of all the possible prices I can charge for my widgets, which price will maximize my profitability over my planning horizon? If when I price my widgets for $\$ 2$, I will sell 400,000 units per year, is that the best possible price in terms of total profitability from the widgets over the product's life? Selling 400,000 units at $\$ 2$ per unit brings in revenue of $\$ 800,000$. From that revenue, product costs of $\$ 1$ per unit make costs equal to $\$ 1 \mathrm{x} 400,000$ equals $\$ 400,000$ in product costs. This leaves $\$ 400,000$ as gross margin or contribution to fixed costs and profit due to the widgets.

As an entrepreneurial marketer, you must ask what would happen to my units sold if I charged other prices than $\$ 2$ ? If a reasonable estimate can be made of units that would be sold at other alternative prices (the "elasticity of demand"), then the entrepreneur can easily find the price that does maximize profitability over the planning horizon. We will describe methods for getting estimates of demand at alternative prices later, after we show how valuable they can be if they are integrated into the cost structure of the venture. Let's assume that our widgets would sell the amounts indicated in Table 3-1.

## Table 3-1. Contribution and revenue consequences of different prices

| Price per Unit | Units Sold | Revenue (\$) | Cost @ \$1/Unit | Contribution (\$) |
| :--- | :--- | :--- | :--- | :--- |
| 1.0 | 600,000 | 600,000 | 600,000 | 0 |
| 1.5 | 500,000 | 750,000 | 500,000 | 250,000 |
| 2.0 (original) | 400,000 | 800,000 | 400,000 | 400,000 |
| 2.5 | 350,000 | 875,000 | 350,000 | 525,000 |
| 3.0 (highest revenue) | 300,000 | 900,000 | 300,000 | 600,000 |
| 3.5 (highest profit) | 250,000 | 875,000 | 250,000 | 625,000 |
| 4.0 | 200,000 | 800,000 | 200,000 | 600,000 |
| 5.0 | 100,000 | 500,000 | 100,000 | 400,000 |

The maximum revenue price is $\$ 3$ per widget for revenue of $\$ 900,000$, only $\$ 100,000$ greater than the original price of $\$ 2$. However, the contribution is $\$ 600,000,2.4$ times the profitability of the original $\$ 2$ price! However, there is even a better price-the price of $\$ 3.50$ per widget has a lower revenue of $\$ 875,000$, but has a higher contribution of $\$ 625,000$. This contribution is 2.5 times the contribution that would have occurred had the original price been used. This is an obviously simplified example, but not simplified in isolating how important the analysis of alternative prices is to most ventures. The impact of the initial pricing decision on the venture's ultimate profitability is typically huge. We'll show some real examples later of what this decision has meant to some firms as well as how to estimate the revenue at alternative price levels. However, first, it is now time to give the quick entrepreneurial marketer's guide to cost accounting!

The reason for bringing up cost accounting is that the profitability of pricing decisions depends solely on revenue and variable costs. Fixed costs are almost irrelevant to the decision on the best price to charge for the product or service. Why is this true? Because if fixed costs, by definition, don't change when the number of units sold changes, then they will be incurred regardless of the alternative price that would be charged. All of the "contribution" numbers in Table 3-1 should really be contribution to fixed costs and profit of the venture. The $\$ 1$ cost assumed in the simple example should be only the variable costs to produce, sell, and deliver an incremental unit. Fixed costs that will be incurred regardless of the price will be subtracted from the contribution to estimate the profitability of the widget product. If any constant number were subtracted from each contribution row, the price that maximizes contribution and profit will not change. Thus, fixed costs do not affect the best price to charge for a product or service. There is only one exception to this rule. If the estimated contribution of the best price is not enough to cover the fixed costs associated with the product or service, then the product or service should not be introduced.

## Getting Price Right Early—lt's Hard to Raise Prices Later!

It is even more important to get the pricing done well early in the product's life because of human nature. If you lower a price over a product's lifetime, no one will complain (except possibly the customers who just bought it at a higher price). However, if you want to raise a price significantly because you realize the product's perceived value is much higher than you thought, it is very difficult. Human nature does not consider such price rises as "fair." If you can convince potential customers that your costs have gone up, that is usually perceived as a legitimate or fair justification for raising prices. Customers do not typically go through such fairness evaluations when they originally see a price for a new product or service. Human nature and fairness arguments take over only when prices are raised. Thus, it is even more important to have your initial price set at a very good level. In some cases, one can even leave it up to the customer-eBay and Priceline both do, and are big moneymakers, as we shall discuss.

However, for many new products, it is usually the innovators who will take a risk on a new product or service. For taking this initial risk, the first customers want (and deserve) special pricing treatment. Sometimes they even deserve to get the product at no cost to try until they are convinced of its value. It is okay for the entrepreneur to give special pricing to these first innovative customers. However, the prices should be structured as charter customer discounts or introductory discounts from a regular price that is publicized as what will be normal after the introduction. This paradigm gives the entrepreneurial marketer much more room to determine marketplace reaction and adjust his/her actual selling prices by adjusting the introductory discount level and time period.

By having a regular price stated up-front, the entrepreneur is free to charge up to that level without generating market perceptions of unfairness. There are some entrepreneurial marketers that have kept introductory prices for over a year after a product has been introduced.

## Methods for Determining Revenue at Alternative Price Levels

Reading the preceding, you are probably saying to yourself, "Sure, it would be more profitable to price so as to get the most profit, but how can I get good estimates of the sales I would realize if I charged alternative prices?" There are a number of ways to do this that can be grouped into two categories-inmarket and pre-market testing.

## In-Market Methods

The in-market method is usually preferable because it is typically a very valid predictor of what revenue would be at alternative price levels. However, it is not always practical to charge different prices for the same product or service in the marketplace. You cannot charge different prices for what is perceived as the same product bundle if market participants will communicate with each other. If one market participant finds out that another participant bought what they perceived as the same product bundle at a better price, they will feel cheated. Even though rationally, they got enough perceived value from their purchase or they would not have made it, psychologically they feel cheated. If they feel that way, they can begin saying bad things about your product. Bad word of mouth is very damaging to a new product or service that lives based upon customer perceptions. If a potential customer hears bad things about a product from a respected source, it can undermine all the other marketing activities you do.

If the customer perceives the product bundle to be different, then the consumer will not necessarily be upset about hearing that someone else paid a different price. For example, airline seats or concert tickets will be priced differently depending on when the customer decides to buy them or exactly where they are located. We will discuss more about yield management and other methods for charging different prices to different segments for different product bundles of the same physical product later in this chapter.

However, there are circumstances where it is highly unlikely for market participants to become upset. These are products or services that are purchased individually and usually not discussed very much among consumers, or products whose prices may be difficult to compare because they are customized to each potential customer. Many product/market combinations can be tested in-market. For example, if one of your primary marketing vehicles is personal sales and your product price is somewhat dependent on the potential customer's characteristics, it is relatively easy to do evaluation of market reaction to different price levels. The best way to do this is to have each of the salespeople involved in the test use different price levels for every nth potential customer on whom they call. For example, if there were three alternative price policies to test, then every potential customer would be exposed to one of the three different pricing policies, and each customer would have a $1 / 3$ probability of being exposed to each policy. As long as it's pretty difficult for the potential customer to compare the pricing algorithm actually used by your salesperson, it will be difficult to compare prices across different potential customers. Thus, even if two customers do talk who have been exposed to different pricing algorithms, they will not be able to find out that they actually were quoted different pricing options. For example, if the pricing of software is developed based upon a fixed charge for organizational training, another charge for installation, and another set of charges per "seat" or installed computer terminal, then it becomes difficult for two firms of different needs to compare prices.

## The Web as the Perfect In-Market Price-Testing Vehicle and a Reasonable Concept Price-Testing Vehicle

Concept testing with different recipients receiving different prices can easily be done on the Web.

## Using Web-Based Concept Testing to Get Price Response for Computer Peripherals

A company had developed a new storage medium for portable computers-the Disk on Key (DOK). DOK is a USB device that has flash memory and can be an external storage device. The same physical DOK device can also be programmed to perform functions that make it easier to leverage working on more than one computer. Confidentiality prohibits us from giving more details. The problem of pricing the different versions of the DOK were made to order for concept testing at different price levels. A Web survey was done on samples recruited to be in the various target markets for different potential versions of the DOK. The respondents were shown a picture of the device, a description of the device, and its benefits (depending on how or whether it was programmed), and given a price as part of the description. Each respondent was exposed to one price for each concept. One quarter of the respondents were exposed to a $\$ 59$ price, one quarter to $\$ 95, \$ 195$, and $\$ 295$, respectively. They were then asked a few questions, the main one being how likely they would be to purchase the product.

Figures 3-1 and 3-2 show purchase intent versus price results for two of the concepts. The first concept, the ABCDEF Key, was basically the unprogrammed, storage version of the key. Here, the purchase intent ( $80 \%$ of the top box, plus $20 \%$ of the second box) goes down as the price goes up.

Figure 3-1. Concept testing: price versus purchase intent ABCDEF Key


Figure 3-2. Concept testing: price versus purchase intent EFGHI Key


Another concept was the same physical device (the EFGHI Key), but programmed to perform some functions. Again, the different respondents were exposed to the concept at one of the same four price levels. The concept description portrayed the features and benefits of the programmed device. The
purchase intent response was much different for this version of the device. As Figure 3-2 shows, the purchase intent reached a maximum at the prices of $\$ 95$ and $\$ 195$ and was much lower at either $\$ 59$ and $\$ 295$. The qualitative feedback on the survey and further personal probing of respondents showed that at $\$ 59$, the value proposition was not credible to some of the respondents: "How could something so valuable be so cheap?" On the other end of the spectrum, the $\$ 295$ price was not as good as the perceived value for many of the respondents.

Please keep in mind that this concept testing was done before any DOKs were introduced and when this firm thought competition would not be coming for a reasonable time. The firm used this methodology for two very important and valuable functions. First, they were able to price the versions that they decided to introduce at appropriate levels, given the consumer value perception of the different versions. Second, they were able to prioritize their development resources to bring out the product versions that would be most profitable. This Web-based concept testing cost under $\$ 30,000$ to perform. The value of the activity was easily in the millions. This is the kind of research that entrepreneurial firms of all size need to do more.

Because purchasing is done individually on the Web, and each person can be exposed to a different, customized Web site, the Web can be an extremely effective and valid in-market price-testing device.

The Internet offers one of the best vehicles for market and price testing ever invented. Immediate feedback, large sample sizes, and live customer reactions make it much more efficient and valid than focus groups or limited city tests. idealab! will often test banner ads and pricing by using 1,000-5,000 banners to drive viewers to specific pages on a site, keeping cookies to track their behavior, and then examining the follow-through once they have reached a site.

With utility.com, a provider of deregulated electric power in a number of states around the U.S., the pricing and messages were honed through a series of tests. The VP of Marketing first stated that he thought we needed to offer $15 \%$ off in order to get customers to switch from their existing supplier. Perhaps, he said, we could get away with only $10 \%$ off if they chose "green" (environmentally clean) power. There were a number of skeptics that led to the company using a test.

## Table 3-2. Experimental offerings tested

| Offer at Site | 5\% | Offer to Get to Site |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6\% | $7 \%$ | $8 \%$ | $9 \%$ | 10\% | 11\% | $12 \%$ | $13 \%$ | $14 \%$ | $15 \%$ |
| 0\% | X | X | X | X | X | X | X | X | X | X | X |
| $1 \%$ | X | X | X | X | X | X | X | X | X | X | X |
| 2\% |  |  |  |  |  |  |  |  |  |  |  |
| 3\% | X | X | X | X | X | X | X | X | X | X | X |
| 4\% |  |  |  |  |  |  |  |  |  |  |  |

After testing a number of different banners to get the best colors, animation, and messages, we tested offers of $5-15 \%$ off, each leading to a page that offered $0-5 \%$ additional if you signed up right away. The results were non-intuitive. The offers that drew the most people to the site were $7 \%$ off and $11 \%$ off. They were significantly higher draws than $15 \%$ off or $10 \%$ off. Once at the site, the best additional offers were $0 \%, 1 \%$, and $3 \%$ off.

The best combined action came from a $7 \%$ offer to get visitors to the site, where they were offered $3 \%$ off for immediate signup-a total of $10 \%$ off. Green vs. non-green power had only a very small effect,
and is now offered as an option on the signup pages. Without the testing, the company would have used the "instinct" of $15 \%$, with both higher cost and lower effectiveness.

The cost for the test was under $\$ 5,000$, since off-peak banner advertising can be purchased very inexpensively, and it only took several thousand tests to make it work.

The Web is not the only vehicle for profitable in-market price experimentation.

## Victoria's Secret Can Use its Many Stores for In-Market Experimentation

Another advantage of the Limited Brands and Victoria's Secret "own store" strategy is that there is an opportunity to do price testing with different stores having different prices for the same item. Originally, VS did their price testing by doing their tests among different stores in the same region. In these tests, different stores in the same region would have different prices for the same items. This method should conceptually be pretty valid because stores in the same region should be comparable on consumer and competitive characteristics that would affect price response. However, VS found that they got into some legal issues in some regions for having different prices in their stores. Also, as we discuss previously, there is a possibility of negative consumer reaction from finding out that your friend paid a different price for an item than you did. There is also a public relations risk if a newspaper or TV news reporter wrote a story on the different prices.

VS then moved to a less valid, but more doable testing method—varying prices across regions and then comparing the sales effects by store across regions. This method has caused no problems and is done a lot because the insights into the revenue price relationship VS obtains are very valuable. Here again, the experimental results may not be as precise as VS would like, but they give them the broad magnitudes of how their products respond to price changes. This is another example of being "vaguely right rather than precisely wrong." VS's price decisions are more profitable using their price tests than they would be if they didn't do them and used some arbitrary, precise formulas for calculating their prices.

## Pre-Market Methods-Pricing and Concept Testing

Our discussion in Chapter 2, "Generating, Screening, and Developing Ideas," of concept testing before a product or service is introduced mentioned that it could be used as a very effective vehicle for estimating the relative differences in sales that would occur at alternative price levels. The basic idea is very simple. Part of the concept description of the product or service is the price. If you want to concept test four alternative prices, then make every concept description have only one of the four pricing alternatives, with each respondent being exposed at a .25 probability to one of the alternatives. So every fourth concept test will have the same price. The estimates of number of units that would be bought at different price levels can be calculated in the same way as any other concept test. What is very valuable to the entrepreneur is to analyze the resulting revenue implications from the alternative pricing policies.

Because any biases of the concept test would be constant over the four different prices, the relative differences in response of one price versus another will usually be quite valid. For example, if the concept test results indicate that $40 \%$ more widgets would be sold at a $20 \%$ lower price, that percentage difference will be the same regardless of what the base absolute sales of the widgets would be. Regardless of whether the actual sales of the widgets in market would be 1,000 units or 10,000 units at the base price, the estimate of $40 \%$ more units that would be sold at a $20 \%$ lower price should hold pretty validly.

## A Price-Concept Testing Example: ABLE Faucets

A small, non-U.S. manufacturer (whom we will call ABLE) of faucets for kitchen sinks had been selling one model of faucet through a major do-it-yourself retailer for two years-and just barely breaking even, when all of the costs associated with the faucet were taken into account. ${ }^{[1]}$ The
manufacturer, ABLE, wanted to see if they could convince the retailer to change the retail price from $\$ 98$ to a higher price, enabling ABLE to raise the wholesale price to the retailer. As part of a larger study, a paired comparison concept test was administered in the retail store to customers who were about to buy a kitchen faucet. The customers were asked to choose which of two alternative faucets they would rather purchase and provided concept descriptions of each. The concept statements included a picture of the faucet and all of the descriptions of the product features and/or benefits that were on the respective faucet boxes. In the large do-it-yourself retailers, the box on the shelf was the major way in which the customer was able to evaluate alternative products prior to making a purchase. The box's perception on the shelf is very important in most mass merchandisers. Each concept statement also had a price associated with it. Each customer that was tested received a concept test with one of four alternative prices for the ABLE faucet- $\$ 98, \$ 127, \$ 141$, or $\$ 160$. The other faucet they were given to evaluate was constant throughout the test. It was the major seller at the retailer with a price of $\$ 141$. An example of part of the concept test survey is shown in Figure 3-3, where the ABLE faucet is B.

Figure 3-3. Portion of ABLE faucets concept test survey

1. Looking at the photos and descriptions below, how much do you think each of these faucets sell for?


- Pull-out spray for hard-to-reach places
- Adjusts from aerated stream to powerful spray
- Can be mounted without deckplate to accommodate accessories
- Easy do-it-yourself installation
- Water-saving aerator
- Washerless, one-piece cartridge
- Lifetime limited warranty
B.

- Pull-out spray
- European design faucet
- Matching deckplane
- Easy installation
- Flexible connector tubes
- Ceramic disc cartridge/washerless design
- 20-year limited warranty
- Solid brass construction

If the price for Faucet $\mathbf{A}$ was $\$ 141$ and $\$ 98$ for Faucet B, which would you purchase?

Twenty-five percent of the people received the ABLE faucet concept description priced at $\$ 98$, a different $25 \%$ received the ABLE concept priced at $\$ 127$, and so on. The competitive faucet was always constant and priced at \$141. The results of this part of the concept test are shown in Figure 3-4.

Figure 3-4. ABLE faucets concept test results


From the results, demand seems to go down very significantly at prices over $\$ 98$. It falls from 40 to 5 , a drop of $85 \%$. If this pricing option was the only alternative ABLE could pursue, it would not make sense to raise the faucet's price. However, some entrepreneurial marketers looked carefully at the ABLE box. They observed that the product description on the box was all stated as product features as opposed to product benefits. For example, flexible connector tubes probably don't mean very much to the typical faucet buyer. However, if the feature was translated into a benefit such as "flexible connector tubes to fit into tight spaces under the sink," it might have more value to a potential purchaser. How many potential purchasers would know the benefit associated with the feature "ceramic disc, washerless cartridge"? How much more valuable is "ceramic disc, washerless cartridge design eliminates leaks and ensures maximum control"?

## Price Response Depends on Perceived Value: The Example Continues

In order to estimate the impact on price response of describing the product on the box with benefits versus features, another cell was added to the concept test described previously. Half of the respondents saw a benefits-oriented concept statement, while the other half saw the original feature-oriented copy from the box. The concept statement for the benefits-oriented box is shown in Figure 3-5.

## Figure 3-5. Benefits-oriented concept statement

1. Looking at the photos and descriptions below, how much do you think each of these faucets sell for?
A. $\qquad$


- Pull-out spray for hard-to-reach places
- Adjusts from aerated stream to powerful spray
- Can be mounted without deckplate to accommodate accessories
- Easy do-it-yourself installation
- Water-saving aerator
- Washerless, one-piece cartridge
- Lifetime limited warranty
B. $\qquad$

- Pull-out spray for multi-purpose use
- European design faucet
- Matching deckplane to cover sinkholes
- Easy step-by-step installation instructions
- Flexible connector tubes fit in tight spaces under sink
- Ceramic disc cartridge/washerless design eliminates leaks, ensures maximum control
- 20-year limited warranty
- Solid brass construction for long life

If the price for Faucet $\mathbf{A}$ was $\$ 141$ and $\$ 98$ for Faucet B, which would you purchase?

The benefits-oriented box copy was also shown to different respondents at one of the same four alternative price levels. The concept test was not only able to estimate the response of the new box copy at the four alternative price levels, but also to compare the benefits-oriented copy versus the existing features-oriented copy for the box at the different price levels. This is because the control faucet was the same for all eight versions of the concept test-two copies times four different price levels. The results when the responses to all eight versions of the concept are compared are very interesting (see Figure 3-6).

Figure 3-6. ABLE faucet demand estimates results


Keep in mind that the concept test biases, whatever they are, are not typically going to affect any one cell of the eight test cells versus any other. The results really add a lot of value and are a wonderful illustration of how important perception is to price response. They also illustrate how valuable it is to help the consumer understand product benefits that are associated with certain features. First, notice that just by describing the product with benefit-oriented statements on its box, sales would double compared to the current box's feature-oriented statements. Twice as many respondents chose the ABLE product versus its major competitor when it was described by relating the features to their consumer benefits. The benefits-oriented description added considerable perceived value to the customer. Approximately the same number of faucets would be sold at $\$ 160$ (a $60 \%$ higher price) for the benefitsoriented box copy compared to the original features-oriented copy. Thus, just changing the box copy to a benefits orientation added over $60 \%$ to the perceived consumer value of the same physical faucet!

The other cells in Figure 3-3 are also quite valuable-both to ABLE and to the retailer. Notice that demand goes down much less severely for the benefits-oriented copy as the price goes up, compared to the existing features-oriented copy. When the retailer evaluated her costs and profit alternatives, the $\$ 141$ price made the most sense if ABLE were to raise its wholesale price for the redesigned benefitsoriented box. At $\$ 141$ with the redesigned box, the concept test shows a true win-win-win situation. ABLE gets to significantly raise its price to the retailer. The retailer sells more units of ABLE's faucets. The consumer gets a faucet that they would value at $\$ 160$ for $\$ 141$. Everyone is happier. It doesn't always work this way, but when it does, it is very gratifying to true entrepreneurial marketers.

## Pricing, the Rest of the Marketing Mix, and Perceived Value

As the preceding example illustrates, managing pricing really is highly dependent on how well the entrepreneur manages the perceived value of her product bundle. This perceived value is affected or can be affected by every element of the firm's marketing mix. The price itself can be a big driver of how potential customers will perceive your product offering bundle.

## Price and Perceived Value

Sometimes, a price that is too low, particularly for a new product, can have a big impact on how valuably it will be perceived. Our next example crystallizes this phenomenon. When one of the authors was in graduate school, his professor had started an entrepreneurial company to manufacture and sell educational kit machines for helping to understand how the binary logic and arithmetic of computers worked. The machines were composed of lights, wires, and switches, so that binary arithmetic and logic could be simulated by series of light bulbs being either on or off. The first kit machine in the entrepreneur's line was the red and blue MINIVAC 601, priced at $\$ 79.95$. The entrepreneur had three target market segments for the MINVAC 601-home hobbyists, high schools and colleges, and computer and technology companies (for training their employees on how computers worked). The product did very well with the first two market segments. Home hobbyists bought the product at consumer electronic stores and some higher tech hobby shops. Many colleges and some upper socioeconomic high schools also bought the MINIVAC as an educational aid. However, no one in the third segment, the corporate sector, bought the product. The entrepreneur interviewed some target customers to try to find the problem. He found out very quickly. The typical description of the MINIVAC by the corporate types was: "Oh, that-it's just a toy!"

The entrepreneur was creative and he listened carefully. He also understood marketing. His next product was the same basic kit-with the switches upgraded to higher tolerances and the machine color changed from blue and red to gunmetal gray. The name was changed to the MINIVAC 6010 and he increased the price from $\$ 79.95$ to $\$ 479$. The MINIVAC 6010 sold very well to the corporate segment at $\$ 479$. The $\$ 79.95$ price was too low for the corporate buyers to take the product seriously-at such a low price, it had to be a toy. The color and packaging of the original MINIVAC 601 amplified that perception. By changing the color, name, and packaging, and most importantly the price, the entrepreneur was able to change the perception in the corporate segment. The impact on his bottom line was just amazing! The price you put on your product offering, by itself, creates a very important part of the perceptual position.

## Pricing of Intellectual Property

One of the most difficult things to price is something that has essentially no cost associated with another copy-i.e., intellectual property. On the Internet, much of what is being sold is information, which has the property that once created (especially in electronic form), multiple copies can be recreated for no cost.

In physical goods, the price is most often related to the cost of producing the item, including some amortization of the intellectual property (research and development) used to create the design, as well as the raw materials and processing cost to turn those materials into the item for sale. Gross margins of $60-80 \%$ are not uncommon in high-tech industries, so that an Intel chip that sells for $\$ 300$ may have a cost (including marketing, R\&D, and production) of \$50-60.

With information, the marginal cost of providing news reports on Yahoo! is effectively zero. The gross margins on the product are often above $95 \%$, with the small cost of goods being associated with maintaining the servers that hold and transmit the information. How, then, should one select the pricing?

One price that has often been successfully used on the Internet is free. Give away the intellectual property so that people will come to a Web site and see the advertising, or take advantage of ecommerce opportunities. Most of the stock trading operations provide research reports and other products that way. E-Trade, DLJ Direct, and Wit Capital are all examples. They also price their actual services-for example, stock trading-as close to their real cost as possible, with only Schwab making a profit on the transaction costs.

Hotmail, ICQ (now part of AOL), and other "virally marketed" services are all vehicles that provide a free service, which is purely communications or other non-physical product, so that they can do advertising and marketing to the users.

There are some groups that can successfully charge for intellectual property, usually through some form of subscription pricing. The Wall Street Journal online is one of the most successful subscriptionbased services on the Web, with a $\$ 69.95$ per year price for people who do not also get the print edition, and a lower price for those who are already print subscribers. The New York Times charges $\$ 9.95$ per year for access to their crossword puzzles online, getting a dedicated audience to whom they can also e-sell. And, of course, playboy.com is an extremely successful subscription site, where those so inclined pay annually for the ability to access photos, editorial material, and chats about sexually explicit material.

## What Else Can Impact Price Response?

Anything that can impact the perception of your product offering bundle can impact the price that potential customers will be willing to pay. Very simply, if the customer does not perceive that the value he or she perceives more than justifies the price, he or she will not purchase. We use the term "product offering bundle" here as we do in other places in this book in the widest interpretation possible. It includes anything that the customer can perceive impacts the value they get from the whole experience of buying and using your product or service. The first time potential customers come in contact with your firm or product or service, they begin to get impressions that will affect their value perception of the offering bundle. If it was an advertisement, did it connote the right positioning? If it was an email, did it come across consistent with a high-value positioning?

When a customer or potential customer calls in to your firm, is the phone answered in a manner consistent with a high-value perception? If potential customers get put on hold for very long, they will get bad perceptions about how fast your firm might react to any problems that need to be corrected. If the phone people are not polite, considerate, and genuinely helpful to the caller, the firm and its product's perception will suffer.

A 100+ year-old shipping company was concerned that they were losing business to competition and that their margins were continually being squeezed by what they thought was increased competitive price pressure on their routes. The firm retained a market research consultant who interviewed some of their customers and potential customers. The consultant found a number of problems that influenced how customers or potential customers perceived the firm and its product offering bundle. One pervasive problem was that the firm's telephonic interface with customers was appalling compared to competition. If someone called into a regional shipping office to either ask about a price quotation or what the status of a shipment was, there were many instances when the phone just rang and rang and was never even answered! The increased price pressure the firm was facing was not brought about by competition, but more by the reaction of their potential customers to the perceived value decline in the product offering bundle. The appalling telephone interface was just one example of the problems with customer treatment at the firm. Only after the customer sales and service operations of the firm were completely redesigned from the ground up, would the company possibly be able to command what it considered reasonable prices.

Other chapters show how all the elements of the marketing mix can affect perception that then affects price response. All of the channel management decisions affect how the end customer will perceive your product offering bundle. The environment your product is in when the customer sees it can have a large impact on its perceived value. The same product will have a higher perceived value if the consumer sees it at Tiffany's rather than at Wal-Mart. The dynamic management of distribution channels we describe in Chapter 4 has as its major objective to achieve high contribution margin and prices. Once a product has been sold at low-end channels, it typically cannot be sold at premium prices at the higher-end channels.

## Perceived Value in Use for Business-to-Business Products

A key way that an entrepreneur can market new products and services to businesses is to show the target business that they will be more profitable if they adopt the entrepreneur's new product or service. If the potential customers perceive that their business will be more profitable if your product or service is used, then they will likely buy it. The key word here is perceive. If the customer understands and believes that your product can make the production, service, or delivery process more efficient or more valuable to the customer's customers, then the entrepreneur can make a nice sale. In order to use this value-in-use positioning, the entrepreneur must understand how the potential customers will want to calculate the value-in-use of the entrepreneur's new innovation. If there are certain measures that an industry uses to indicate efficiency or productivity, they will probably feel more comfortable if they see the new entrepreneurial innovation with data on that measure.

How does all of this relate to pricing? According to Irwin Gross of the Institute for the Study of Business Markets at the Pennsylvania State University: ${ }^{[2]}$
"Customer Value" is the hypothetical price for a supplier's offering at which a particular customer would be at overall economic breakeven relative to the best available alternative to the customer for performing a set of functions.
"Customer Perceived Value" is a customer's perception of his/her own "customer value."

Although customer value can never be known precisely, it is a very useful idealized construct, similar to a "perfect vacuum" or a "frictionless plane" in physics. ${ }^{[3]}$

The best pricing situation occurs when there is a perceived win-win situation. The buyer perceives that he or she will have higher "customer value" when adopting the new entrepreneur's product, including the price of the new product from the entrepreneur. The entrepreneur in turn makes much higher profit margins than normal because of her understanding of how to create perceived value better than her competition.

Your competition may not be as treacherous in many business-to-business situations as it may first appear. The concept of really going into depth to understand perceived customer value is not that common. According to Gross, who has studied business-to-business markets for over 20 years:
"Customers spend more effort to know supplier's costs than suppliers spend to know customer's values. ${ }^{[4]}$ A really effective entrepreneurial marketer will spend her scarce time and resources to understand exactly how her target market participants develop perceptions of customer value and what methods are best for changing those values.

There are typical components that make up perceived customer value for new entrepreneurial product offerings. These can be grouped into product value, supplier value, and switching investments. According to Gross, the product value is the relative benefits delivered by the product itself, independent of the supplier, while the supplier value is the relative benefits delivered by the supplier, independent of the product itself. The switching investment is the costs and risks involved with the transition from the current practice to the implementation of the new alternative. ${ }^{[5]}$ All of these benefits, of course, are as perceived by decision makers in the target market. Gross has categorized components of attributes that affect perceived customer value, dividing them into attributes that impact perceptions of immediate customer value versus those that will impact expected customer value in the future. Table 3-3 outlines the attributes that can impact perceived customer value.

# Table 3-3. Attributes affecting perceived customer value (parentheses indicate negative attributes) 

|  | Immediate | Expected |
| :---: | :--- | :--- |
| Product | Product performance Durability Serviceability <br> Downstream performance (Current risks) | New technology Product flexibility <br> Follow-on products (Long-run risks) |
| Supplier | Supplier performance—delivery technology, <br> sales, services, etc. (Promotional values, <br> services) | Supplier relationship Technology access <br> Security of supply Strategic (Supplier <br> power) |

A good entrepreneurial marketer will do whatever is necessary to make sure that his or her offering's perceived customer value is higher than her competition. He or she will understand the components that are important to the members of the target market. He or she will then make sure his or her product offering and all of the marketing elements that support it are doing the best job possible in positively impacting the value perception. As reflected in Table 3-3, it is not just the product or service offering itself that needs to be impacted. It's also much of the supporting services and impressions that the entrepreneurial venture leaves. The sales force, the marketing communications, the channels used, the product packaging, the product's name, the service package, etc., are all part of what can impact perceived customer value. For business-to-business markets, real entrepreneurial marketing can enable much higher prices than competition.

## The SAS Institute, Inc.-Very Effective Management of Perceived Customer Value

The SAS Institute, Inc. has become the world's largest privately held software company by creatively and uniquely applying many of the concepts in this chapter. The Institute provides data warehousing and decision support software to target markets in business, government, and education. The end result of this entrepreneurial marketing is a very unique software pricing strategy. All SAS Institute software products are licensed, not sold. According to their brochure: "SAS Institute's pricing strategy is designed to foster Win/Win relationships with our customers which lead to building productive longterm partnerships." ${ }^{[6]}$ The Institute is not shy about the objectives of their pricing policy. "The strategy is to establish pricing consistent with the value received by SAS software customers, as they implement mission critical applications. ${ }^{[7]}$

The SAS Institute pricing model is unique among major software vendors. The other vendors typically sell a software purchase along with a maintenance contract. Their customers buy each new software release and have the option to pay ongoing fees for technical support. These other software vendors, typically public, or with objectives of going public, want to maximize the short-term revenue they obtain with each sale. The suppliers of investments for software vendors in the financial markets do not necessarily let the software firms price for value over time as SAS does.

The SAS Institute license model has the customer pay a first-year license fee and an annual fee to renew the license. According to SAS, the annual license model provides the customer with a number of valuable benefits:

1. Low cost of entry (typically less than fees paid for entering a purchase/maintenance model).
2. Rapid return on investment (ROI).
3. The most current release.
4. Technical support.
5. The most current documentation.
6. All updates during the license period.
7. Customers' investments are protected by ensuring that they always have the most up-to-date technology. ${ }^{[8]}$

The customer is never locked in to more than a one-year commitment to SAS. The company must then be perceived by their customers as continually providing excellent technical support and on-going enhancements to the software. If the customers do not perceive they are getting value from SAS, they can go elsewhere. The customers can also easily add or delete components of the SAS software as their needs change over time. SAS even comes out and says in their own literature that: "The strategy is to establish pricing consistent with the value received by SAS software customers as they implement mission critical applications." ${ }^{[9]}$

Let's compare SAS's pricing model to the typical enterprise software company. The typical company sells its software once, with a very big sales effort. They then charge annual ongoing maintenance fees of $15-18 \%$ of the initial purchase price. These maintenance fees sometimes include updates and improvements to the software. Is this pricing consistent with the customer's perceived value? Not really. The customer should receive increasing value as the software becomes implemented and tailored to the customer's specific situation and as it is improved and updated over time. The perceived value to the customer of software will almost always be higher after a successful implementation than before it. If the implementation is unsuccessful, then the reverse situation would hold. Because of these risks, customers are not willing to pay as much up-front for software as they would pay if they had continual successful experience to value. The amount the typical enterprise software company can charge up-front is thus less than the discounted present value that the customer would pay over time under the SAS Institute rental plan.

SAS's job becomes keeping its customers continually delighted so that they will continue to pay the relatively large yearly license fees. SAS does that very well. They renew $98 \%$ of their customers annually! Thus $98 \%$ of their revenue is recurring. This is an astonishing statistic for any software company. They also have used their recurring revenue as a base for expansion. The latest public statistics available show revenue of over $\$ 1.5$ billion for 2004, more than double that of five years earlier. ${ }^{[10]}$ SAS also has enough gross margin to spend over $30 \%$ of revenue (revenue, not profits!) on research and development, to enable them to provide software improvements that continually delight their customers. ${ }^{[11]}$

The SAS customer value orientation and their pricing model that captures more of that value than competition is supported by a superb employee group that is in turn supported by very marketingoriented employee policies. SAS treats its employees in ways that foster excellent long-term performance and high loyalty. Some of the policies include 32-hour work weeks, on-site day care, unlimited sick leave, and a fully supported gym on the premises. In an extremely competitive market for software talent in the Raleigh Durham research triangle, SAS has a turnover rate lower than 5\% compared to over $20 \%$ for many competitive software companies.

Why don't other software companies emulate the value-oriented pricing model of the SAS Institute? We can only speculate. One reason may be that too many U.S. companies (and their financial backers, including public shareholders) are too short-term oriented to pass up one-time purchase prices for a longer-term, but higher-value, rental revenue stream. The other reason may be lack of courage to look a customer in the eye and ask for a legitimate percent of the perceived value that your software is delivering. We note that the rise of Web-based Application Service Providers (ASPs) such as Salesforce.com have enabled value-based pricing. We hope that more entrepreneurial marketers will be encouraged by the SAS Institute example to not be afraid to set pricing policies to receive some of the perceived value they are creating.

## Customer-Determined Pricing

Another method for pricing at the perceived value to the customer is to let the customer set the price. This includes various auction methods, a large choice of pricing alternatives, and even riskier strategies of "pay what you think it was worth." The auction world has been completely transformed by eBay, which now helps generate sales of more than $\$ 50$ billion of merchandise per year. Here, each customer believes they are getting a good deal, while the excitement of the auction often generates prices above what the same item is available for elsewhere-extra profits for the seller.
eBay has several methods for the customer to determine pricing: BuyItNow, auction, and half.com's offers. In the traditional auction, there is a seven-day period during which multiple bidders can make offers and see who is the highest bidder. The person with the highest bid when the auction closes wins-with eBay's software automatically bidding up to preset limits for customers who cannot be present in the final seconds. A set of software called sniping software has been developed to conceal bidding until the final seconds. But ultimately it is the customer who determines the price of the items on offer. The seller can insure some gross margin by having a reserve price, below which the item won't be sold. Sellers can also offer a "BuyItNow" price for those customers who cannot wait till the end of the auction. This is usually set to a price above that which previous auctions in similar items have sold, although if the seller has multiples of the same item, it may be set lower (more like a traditional store price). Finally, eBay acquired half.com, which offers books, CDs, and some other items at what was originally meant to be half of the price for new items. Because condition and seller reputation are both important to buyers, there is now a range of prices for popular items, so the buyer can choose to pay more or less for the same book, depending on condition, seller reputation, shipping date, etc.

In all the preceding cases, it is the customer who determines what he or she is willing to pay. This is much like the old days when one bargained with every merchant-before James Cash Penny posted fixed pricing in his stores. And it is much the same in many other countries in the world, where the listed price is just a starting point.

At Priceline, the customer selects the price, but not the specific merchandise. You can bid for a firstclass hotel room in New York, but may be given one in any of a large selection of hotels. Similarly, Priceline has deals with Delta and other airlines that allow them to sell airline tickets at whatever price they'd like. Customers bid for tickets between a city pair, but cannot select the time of day or airline. Priceline determines if they can make money selling the user a ticket out of the inventory that the airlines have made available to Priceline at fixed prices. Here, the customer is determining price, but with time of day and airline chosen by the seller.

Often, the customer will have a different utility for money than the vendor. In this case, smart vendors will offer a range of prices that allow the customer to make the choice that is optimal for them, while increasing the profits to the vendor. Often this involves the capital/expense budget tradeoff. Much of today's outsourcing of services falls into this category.

Evolution Robotics, for example, is offering their LaneHawk system, which combats supermarket losses, with three different pricing plans. LaneHawk recognizes items that are on the bottom of shopping carts but not rung up on the register, either through innocent error or deliberate fraud. Some chains are willing to pay the full capital cost upfront, in return for much lower monthly software maintenance costs. Others prefer to not pay any capital costs, and just pay a monthly rental—in this
case, Evolution's cost of funds is taken into account, and customers often give Evolution much higher total margin (over three years) than if they had borrowed the money and paid the capital costs. A third choice-sharing the savings from loss prevention-is also offered. Here again, customers are determining the price they will pay based on their own preferences, capital availability, and risk tolerance.

While not all entrepreneurial ventures lend themselves to customer-determined pricing, when the products and services are new, and there is no established competition to overcome, it can often lead to much higher profits than the traditional price-testing methods. In addition, when the customers are determining the price themselves, something that is often a source of negative feelings (high prices) becomes the source of positive feelings, since it is truly a customer choice for what to pay, which is empowering.

## Conclusion

We began the chapter by showing how common cost-based or competitive-based pricing rules may be "precisely wrong." We showed that a "vaguely right" approach is to attempt to charge the price (or prices) that maximizes your profit return over your planning horizon. It also is very important to get the initial price level at a good level, because it is much more difficult to raise prices over time than it is to lower them. Next, we described methods for in-market and pre-market (concept testing) for determining the potential relationship between alternative prices and the sales revenue that those prices would produce. The Web is the perfect in-market price-testing vehicle for many products.

We then showed a number of examples of how the price you can and should charge is intertwined with all the rest of the elements of the marketing mix. The marketing mix and the product-offering bundle all affect the perceived value for the potential customer. This perceived value in turn affects the price the consumer is willing to pay. For a consumer product, we demonstrated how a change in the product description on its box would double the sales of the product. The new box described valuable consumer benefits as opposed to the older box that described product features. We showed how perceived value in use affects the price response of business-to-business products. We showed how the SAS Institute's unique marketing mix and pricing structure captures and creates more perceived customer value than competitive software customers. Finally, we concluded the chapter by showing how it is often possible, and even desirable, to have the customers themselves determine the price dynamically. This can lead to higher gross margin, and more satisfied customers.

