Strategic Pricing for Industrial Products

Getting paid for the Value you Provide

Have you experienced any of the following pricing problems? If so, Strategic Pricing may be of interest:

- New products are priced with good margins but rarely achieve these based on missed cost targets and strong competition.
- Product performance issues make it hard to justify or extract premium pricing.
- Even with superior products – you are treated like a commodity.
- Customers leverage their overall volume and the next “design win” to bully you into price concessions.
- Customers expect year over year price reductions – at least equivalent to assumed productivity increases.
- Cost reduction is becoming harder to achieve and can’t keep up with price pressure – where do you outsource after China???

We know intuitively that raising prices will improve profit – but how does it compare to other strategies? For a hypothetical business with pure inelastic demand[1] (no loss of volume) and cost structure of 50% variable, 30% fixed and 20% operating profit:

- 1% price increase → 5% profit increase
- 1% variable cost reduction → 2.5% profit increase
- 1% fixed cost reduction → 1.5% profit increase
- 1% volume increase → 2.5% profit increase

Improved price clearly has the most leverage but customers are unlikely to accept higher prices without a fight. For this reason and to gain long term control over pricing, we will examine key definitions and sequential steps required to build a value based pricing system.

A basic definition of strategic pricing is “… to price more profitably by capturing more value, not necessarily by making more sales.” It is used to avoid the circumstance where “… vendors find themselves perpetually locked into a passive stance in which they are reacting to the tactics of customers and competitors, rather than proactively managing them.” [2]

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1 - If we assume some demand elasticity and reduce volume by 2.5% when increasing price by 5%, we still generate a profit improvement of 6%. Only in the case of highly elastic demand (large volume change with price) will we lose profits with a price increase or, as a corollary, improve profits with a price decrease. In virtually all cases, industrial customers have inelastic demand. This is based on how they value the products, services and relationship; relatively high switching costs; and the fact that product volume is not an independent variable – it is derived from the customer’s sales and, therefore, not subject to a traditional demand curve.

2 – “The Strategy and Tactics of Pricing”, Thomas Nagle and John Hogan, Pearson Prentice Hall, 2006.

Strategic Pricing Principles

In its simplest form, strategic pricing is based on the following concepts:

1. Customers rarely pay for the full value they receive due to industry competition and lack of clear differentiation.
2. To capture higher value, suppliers need to:
   - Understand and educate customers on the value they provide.
   - Use this knowledge to segment markets according to product features and prices that best meet customer needs and competitive dynamics.
   - Set and negotiate prices on the basis of customer value and the incremental revenue / cost of alternative product offerings.
3. A well defined pricing policy is required to discipline the process. Customers must see a rational and firm basis for pricing decisions. Your staff must see management commitment and be educated on both pricing logic and the pricing process.

The Value Equation

There are two fundamental elements required to avoid competing on price:

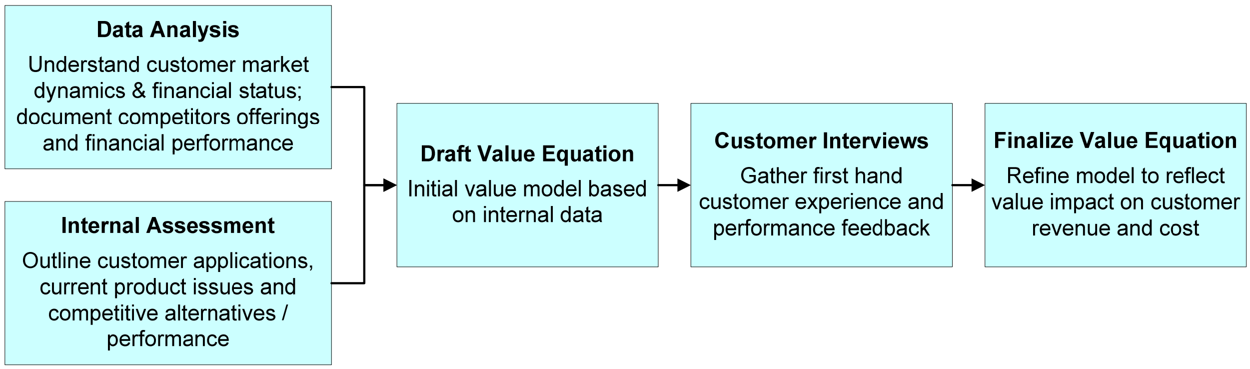
Value – is derived from (1) increasing customer revenue (typically by making their product more competitive), (2) reducing life cycle costs with attributes like faster delivery or higher reliability and (3) providing valuable business assistance such as applications / design expertise or manufacturing process support. Remember that in the end, you only get paid for the value you provide - or less when you don't understand this value, can't justify the value, cave in to demands for discounts or have no differentiation from lower cost competitive products.

Intel provides an example of moving their value from a cost basis to a revenue basis. Their Pentium product originally offered superior value due to the on-board math coprocessor which reduced the customers' manufacturing costs. Once AMD was able to match that feature and started keeping up with Intel innovations – they effectively eliminated Intel's pricing advantage. Intel was aware of their premium image with consumers and did more research into the value this could create for their direct customers. Once they could demonstrate that retail customers were more likely to buy a PC using an Intel processor and would pay a premium price, they launched their now familiar "Intel Inside" campaign and firmly established their premium performance and price position.

Differentiation – is literally how you differ from the competition. Total value is the sum of Reference Value (the price of alternative products) and Differentiation Value (the incremental value of attributes unique to your product offering). Unless you have a substantial and sustainable cost advantage, you will be competing on your differentiation value.

In order to define and leverage customer value, you need to understand the customers' business model, the sequence of steps used to acquire, apply and service your products and how your product impacts the customers' profitability. This knowledge is derived from both internal and external sources as follows[3]:

3 – "Pricing with Confidence", Reed K. Holden and Mark R. Burton, John Wiley & Sons, 2008.



Misjudging customer value can have dire consequences, as GE discovered when they introduced a totally new jet engine targeted for the evolving twin engine commercial airliner market in the late 1980's. Although technically superior to offerings from Pratt & Whitney and Rolls-Royce, customers were unwilling to bet on a new design with unknown cost of ownership. GE responded to this financial value concern by creating the "Power by the Hour" program where customers leased fully maintained engines – paying only for actual up time. This innovation brought commercial success to the engine and moved GE to market leadership and 40% market share.

Value must ultimately be expressed in financial terms. This provides the basis for moving the sales discussion from defending price to a balanced discussion of value and price. The supplier evaluation becomes a relative value comparison in the form of: [4]

$$(\text{Value}_A - \text{Price}_A) > (\text{Value}_B - \text{Price}_B)$$

The better product (A) delivers a greater differential between value and price – not necessarily the lowest price. This represents all buying behavior and is a fundamental premise underlying strategic pricing.[5]

Once value has been defined and quantified, it can be communicated with appropriate sales materials. These include:

- A summary of key customer performance needs and value drivers.
- An explanation of how product features and supplier services map against these customer value drivers.
- Quantitative comparison of value derived from your offering relative to competitive products. This typically takes the form of a cost of ownership model or ROI calculation.[6]

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4 – Harvard Business Review article "Business Marketing: Understand What Customers Value", James C. Anderson and James A. Narus, Nov-Dec 1998.

5 – Note that when values are equal (commodity), the decision then becomes one of price alone ($\text{Price}_A < \text{Price}_B$).

6 - The quantitative model should be kept relatively simple – otherwise sales and customer personnel tend to lose track of the assumptions and don't understand the calculations. The model should also use customer supplied data whenever possible rather than industry averages or internal assumptions – otherwise it may lose credibility.

Understanding Buyer Behavior
Buyers can be classified into four different categories: [7]

1. Price Buyers – buy exclusively on price and are not influenced by value arguments. Decision making is almost always done within purchasing. The best approach is to offer the bare minimum solution and strip away any extra features and services. Establish a walk-away price and stick with it.
2. Value Buyers – will make decisions based on a technical and/or business analysis of value. This evaluation is typically performed by a staff member with domain expertise. The final decision making authority may rest with this expert or a department manager. The best approach is to provide choices with various levels of performance and service. Make sure one meets the budget but include others that provide additional value. Include an analysis to support the best choice.
3. Relationship Buyers – trust that their suppliers will provide solutions needed to win market share. They expect you to provide solid, reliable solutions (not necessarily state of the art) and reward you with loyalty. They are typically small to mid-sized firms where final authority lies with a senior manager. If you are a current customer, you have an inside track as long as you provide a complete suite of products and the technical expertise to help them implement the best solution. If you are trying to penetrate a relationship account, start slowly and fulfill a small need with a great product to prove the product and company's reliability.
4. Poker Playing Buyers – focus on price to gain concessions even when value and relationship are important. These are typically large firms or those with a new purchasing manager out to make a reputation. They generally use a selection team where the buyer controls when and if the seller can meet with other team members. One clue to a poker player is that a technical decision maker will suddenly drop out of the picture and purchasing will take over. Treat the buyer in a similar fashion a price buyer. Offer a low priced, bare bones solution but also include the solution that you believe they really need. Make every effort to meet with additional members of the selection team – using a selling team to address the needs of their technical, financial or management counterparts on the buying team. When faced with demands for lower price – be prepared to offer a solution of lower value. Always trade value for price and do not throw in valuable services for free. Save some small concession or discount to close the deal.

The value of calling a poker players bluff with a lower priced, lower valued alternative was demonstrated by a VP of sales selling to GM. He was facing a tough negotiation and had just learned about this tactic. Unfortunately, his company had not yet rolled out lower cost and performance flanking products. When the GM purchasing agent demanded a lower price on a critical component, the VP responded that there would be no problem in providing a lower cost version – going so far as to provide a catalog number. After discussing the reduced performance of this alternative, the purchasing agent elected to stay with the original offering at the original price rather than accept a performance risk. Calling the purchasing agents bluff with a bluff of his own dropped an additional million dollars to the bottom line.[8]

7 & 8 – "Pricing with Confidence", Reed K. Holden and Mark R. Burton, John Wiley & Sons, 2008.

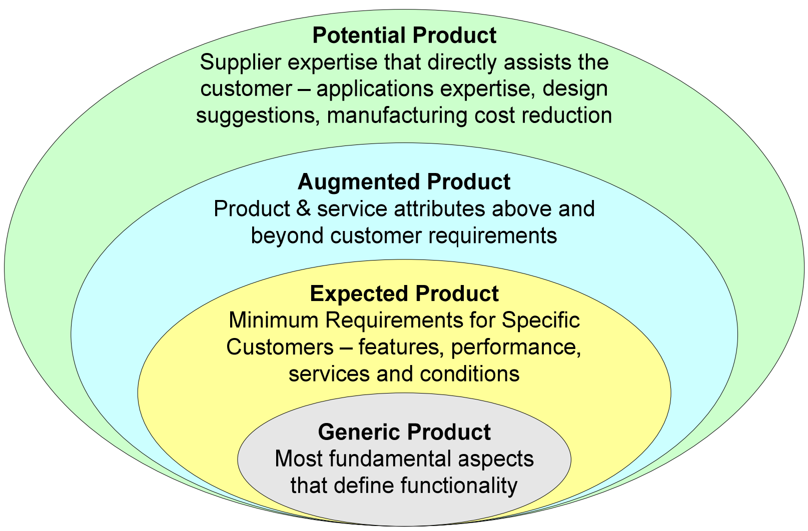
Develop the Product Offering

The product offering defines the set of product and service features that are designed to match various target customer needs. It should include:

- Core products that meet or beat competitive performance (ideally based on a common platform).
- Low end or "flanking" products that can be offered to price buyers or used as alternatives when poker players demand a lower cost option.[9]
- Well defined solution elements (optional features and services) that allow sales to fine tune value in exchange for price.

The core products and optional features are configured to meet customer requirements while also providing higher value than competitive offerings. An example of this approach is the way Intuit dominates the small business financial software market in spite of competing with Microsoft. They have packaged their QuickBooks accounting software into five versions with different levels of optional features and delivery approaches – thereby providing a range of price-value alternatives.

Potential levels of product sophistication versus customer expectations can be envisioned as:[10]



When making decisions on which capabilities to include in the "standard" product versus those to make optional one needs to consider both the level of differentiation and cost to provide. In general, features which support higher pricing with low incremental cost should be included in the base product. Features and services that provide substantial differentiation coupled with high cost should be treated as options. Proprietary, high margin consumables and maintenance agreements are always treated as options.

9 – These low end products also serve the important function of blocking entry by new competitors when you are the dominant firm. A common approach for new entrants is to target low end needs that are not met by incumbent firms. Once established, the new firm then gains industry experience and expands its product line upward. This is precisely what Canon did starting in the late 1970's to successfully penetrate the copier market.

10 – Based on concepts from the Harvard Business Review article "Marketing Success Through Differentiation – of Anything", Theodore Levitt, Jan-Feb 1980.

The potential impact of value added services should not be underestimated. IBM was faced with a significant problem as mainframe computers became commodities and sales were being eroded by work station and server products. They transformed themselves under Lou Gerstner's leadership by adding expertise in software and business process optimization – moving from a hardware supplier to a business solution provider.

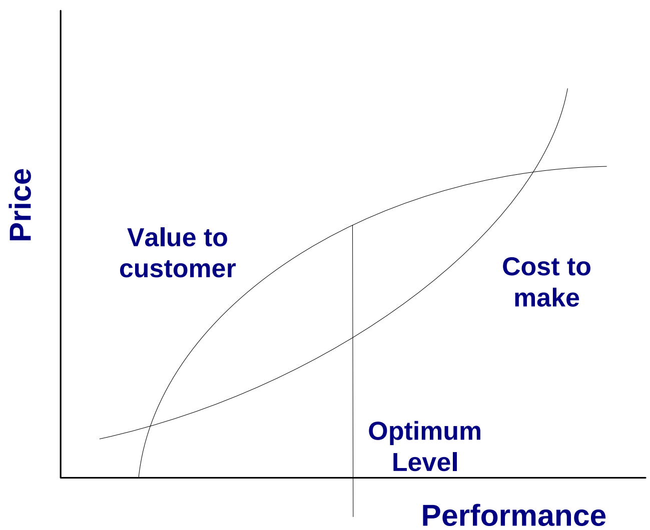
The steel industry is another example of how intimate customer knowledge and service differentiation provide competitive advantage. In this commodity business, Tenaris SA has dominated the niche for seamless steel pipe used for offshore oil drilling. Because of recent market growth, global steel companies have attempted to penetrate the market with attractive prices. Tenaris has blocked their entry by providing sophisticated technical support and just-in-time delivery – thereby justifying premium pricing.

Setting Prices

The traditional approach to pricing industrial products is cost plus an appropriate markup. This is viewed as "fair", is simple to calculate and, assuming the cost assumptions are sound, provides predictable margins. Value pricing, on the other hand, starts with customer value and sets price to capture a significant portion (but less 100%) of that value. Jumping immediately to this approach is difficult for many companies. An intermediate step is to use 'cost plus' but vary the markup according to customer value – such as earning 35% margin on poorly differentiated products and 65% on unique, high value products.

This approach was used with great effect by Parker Hannifin. They moved from a 'cost plus' pricing model to one where pricing formulas were adjusted based on incremental customer value and degree of commoditization – ranking products from A (pure commodity) to D (unique or customized). This simple technique helped them increase net income by over 500%.

Pricing considerations should start early in the product definition and design cycle – since cost is driven by product features and configurations. Theoretically, the optimal price is based on maximizing customer value relative to your cost to supply that value – where value is subject to decreasing marginal utility and cost tends to rise exponentially with performance. This is graphically represented as:

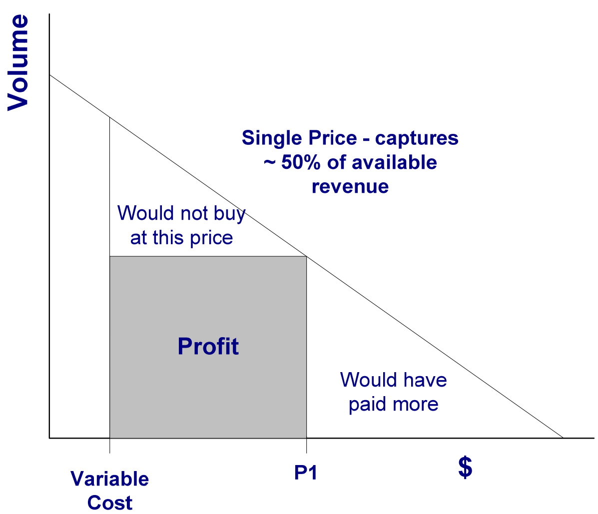


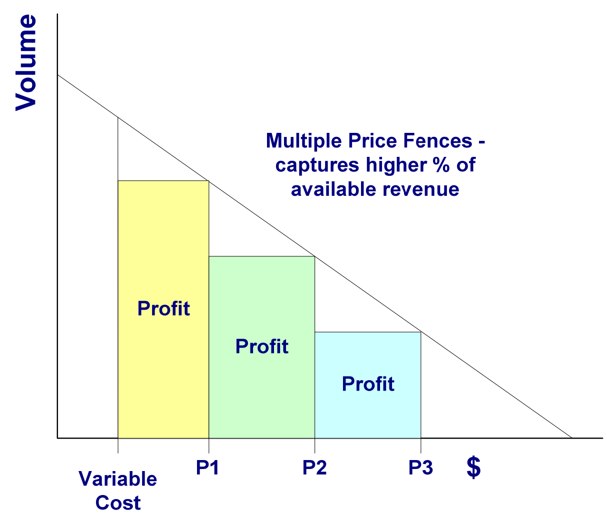
In practical terms, your pricing will be constrained by alternative solutions in the marketplace, customer expectations and competitors' reactions. Once you understand your value and positioning, you need to judge how far you can deviate from established market prices before provoking customer revolt on the high end or competitive price wars on the low end. This is almost always an iterative process of internal estimates, market testing and refinement. In keeping with common pricing wisdom, err on the side of higher initial prices based on both the potential to have underestimated value and the difficulty in raising prices later. If you must adjust down, justify the change based on learning curve cost reductions rather than just caving in to customer discounting demands.

Establish Market Segments and Fences

At this point you have defined basic product offerings and list prices. The next step is to recognize that different customers are willing to pay more or less for the value they perceive in otherwise identical product offerings. This perceived value is a complex mix of actual product features, how the product functions within their application and how well the customer understands and values that product performance. As a result, prices (and offerings) need to be adjusted to capture maximum profit from different customers.

This can be seen in a theoretical examination of the demand curve. No single price can maximize the suppliers profit since there will always be some buyers unwilling to pay that price and others who would have paid more. In order to maximize profit, you need find a way to charge customers the maximum price they are willing to pay. This can be seen graphically as:





The mechanism used to achieve this objective is to define market segments based on common customer characteristics. Within each segment, you can tailor the product offering and pricing to optimize customer value (and maximize profit). To protect this variable pricing, the segments must be clearly defined and have "price fences" erected. These price fences establish the criteria that customers must meet to qualify for the pricing within a segment.

Traditional segmentation has been based on:

- Buyer type – usually providing lower prices to attract new buyers.
- Location – based on differences in cost to serve.
- Time of purchase – so that the supplier can optimize capacity utilization.
- Quantity – based on lower costs or to provide incentives for additional orders.

Other techniques include:

- Design segmentation to satisfy price sensitive customers with a low end product without corrupting premium price / performance customers. This was done by Intel with the low end positioning of the Celeron microprocessor versus the Pentium. Sony created an entirely new brand (Aiwa) to compete with low cost consumer electronics firms while maintaining the integrity of the premium Sony brand. Another example is Dow Corning's response to attack by low-priced competitors in the silicone market. They created a low price product (Xiameter) with strong fences to protect premium offerings. These fences include a narrow range of performance features and considerably fewer services with Xiameter – thereby forcing customers to exchange value for price.
- Bundling optional features and services with an attractive price in order to sell additional products. The items included in the bundle must be relevant to the targeted customers and provide real value. These bundled solutions can also serve as standard configurations to initiate a discussion of customer needs.

Whatever form of segmentation is selected, the resulting price fences must be based on clear, objective criteria and be logical to both sales and customers. They can then be used to enforce the discipline of trading value for price reductions.

<u>Pricing Policy</u>
These techniques need to be accompanied by a well defined pricing policy that includes:

- Definition of the conditions and amounts that the company will discount prices – always in exchange for specific customer behavior.
- Clear accountability – typically providing sales reps with the ability to structure deals within the policy guidelines.
- Management escalation and discipline to quickly address price exceptions (outside of guidelines) and to accept the risk of lost orders. It is critical that managers do NOT give in to threats and power plays – consistency is required to re-educate customers that you have a rational pricing structure.

Returning to the Parker Hannifin example of pricing according to degree of commoditization – another factor in their success was the leadership of CEO Donald Washkewicz. He recognized that Parker Hannifin provided added value on some of their products and instilled the confidence to act on that value. Interestingly, he was directly supporting their own mission statement to be "a supplier of high-value products and services." This type of executive recognition and commitment is essential to move from ad hoc discounting to pricing and negotiating on the basis of customer value.

Implementation

Once the previous steps have been completed, the new pricing logic, policy and process must be communicated and enforced. This will require:

- Education of sales, marketing and management on how the corporation is linking product attributes to customer value and pricing decisions.
- Explanation of the logic behind the new pricing policy and senior management's determination move away from ad hoc discounting.
- Technical sales training on product configurations, customer applications and how to evaluate relative customer value. This will include the use of Cost of Ownership or ROI analytic tools.
- Sales training on how to move customer interactions to a value discussion and how to overcome price objections by offering to remove features or services in exchange for price.

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Implementation of Strategic Pricing requires corporate commitment, cross functional project management and persistence to convince customers that there is a rational and firm basis for pricing. The payback is disproportionately high profit impact without radical methods of cost reduction. Secondary benefits are clear positioning of current products and exceptional customer insight to drive creation of next generation products that exhibit even higher differentiation and profit potential.

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