What is Value-Based Pricing?

In this article, the author explores value-based pricing from a mathematical perspective, and explains value-based pricing as a philosophical approach to pricing that aims to price offerings according to the value customers associate with the offering in comparison to its alternatives. Tim J. Smith is the managing principal at Wiglaf Pricing, adjunct professor at DePaul University, a frequent PPS speaker, instructor and presenter, and the Academic Advisor for the Certified Pricing Professional designation. His most recent book is Pricing Strategy: Setting Price Levels, Managing Price Discounts, & Establishing Price Structures (South-Western Cengage Learning, 2012). He can be reached at tsmith@wiglafpricing.com.

Value-based pricing aims for prices to reflect the value that customers associate with a product or service offering. Simple enough to state, but what does this mean?

Defining Value
In the mind of a customer, the total value of an offering is the difference between the perceived benefits a customer gains in acquiring the offering and the perceived price they pay to acquire the offering.

Mathematically, we define value as:

\[ V = B - P \]

where \( V \) is for value, \( B \) is for benefits, and \( P \) is for price.

This simple equation states, from the customer’s perspective, value is the benefits gained less the price extracted.

According to this definition, if an offering delivers more benefits, customers gain more value in transacting. If it delivers less benefits, customers attain less value in transacting. In contrast, if the offering’s price goes down, customers gain value in transacting. If price goes up, customers achieve less value in transacting. That overcomes the rationality hurdle.

We use this specific definition of value because it (1) reflects the customer’s perspective to the issue of “what is a good value” and (2) it distinguishes the concept of value from benefits and price. For defining value-based pricing, this is the most relevant definition of value.

In relation to economic terms, this equation defines the total value to be the same as consumer surplus. Benefits reflects the potential industry demand function, or the potential willingness of customers to pay. And price is price.

While the above equation defines the total value acquired by customers in transacting, it falls short of fully reflecting how customers think and behave and therefore needs refinement. In particular, the challenge with using value alone arrives from the fact that the full value of an offering rarely enters a customer’s purchasing decision process.

To prove the point that total value is largely irrelevant for modeling customer purchase decisions, consider a thought experiment contrasting the total value you derive from water to diamonds and the price you pay for each. Without water, you die, but water tends to be a cheap, if not a free, commodity, even though most people associate a high level of benefit from living. In contrast, diamonds provide few intrinsic benefits, yet most people will pay dearly for them.

Hence, as this simple thought experiment demonstrates, prices are largely uncorrelated, that is, have little-to-nothing to do with the total value that offerings deliver.

Defining Differential Value
The needed refinement for modeling customer decision making is to move from considering the total value of an offering to the differential value. Differential value is the difference in value acquired through the focal offer versus that acquired from a competing alternative offer.

Mathematically, we would define differential value as:

\[ \Delta V = V_F - V_A \]

where \( \Delta V \) is the differential value associated with the focal firm’s offering. The subscripts \( F \) and \( A \) denote the firm and the alternative respectively. Therefore, \( V_F \) is the total value delivered by that focal firm’s offering and \( V_A \) is the total value delivered by the competing alternative offering. Differential value is simply the difference in total value delivered between two offers.

Customer Purchase Decision Criteria
Customers select between offers according to the differential value. Economists talk about this selection as making tradeoffs, while marketing talks about the selection as making a purchase decision.

If an offer provides more value than its competing alternative, customers will choose that offering. If an offer provides less value than its competing alternative, customers will choose the alternative offering. That is, customers choose the offering which delivers the greatest differential value for them.

Though most people associate a high level of benefit from living, one must wonder if people choose a particular offering because it provides the greatest differential value for them.
The customer purchases if and only if $\Delta V \geq 0$.

**Deriving Value-Based Prices**

At this point, deriving the goal of defining value-based pricing is algebraic. Expanding the use of the subscripts F for firm and A for the alternative across the terms of B for benefits and P for price, we ascertain:

$$\Delta V = (B_p - B_A) - (P_p - P_A)$$

Then, using the customer purchase decision criterion of positive differential value, we are seeking:

$$(B_p - B_A) - (P_p - P_A) \geq 0$$

Rearranging this equation to identify the price the firm can charge to drive the customer to purchase, we have:

$$P_p \leq P_A + (B_p - B_A)$$

This last equation identifies the goal of value-based pricing. It states that the maximum price the firm can charge a customer is the price of the competing alternative adjusted for the firm’s differential value.

The goal in value-based pricing is to identify and use that maximum price. That is, value-based pricing strives to price offers in relationship to their competing alternative, taking into account the difference in benefits—both positive and negative—that the firm’s offer delivers in comparison to the alternative offers.

**Implementing Value-Based Pricing**

Notice we speak of goals and aims with respect to value-based pricing. Value-based pricing is a philosophical approach towards pricing, not a specific tool, methodology, or structure. Formulas, techniques, software, methodologies, processes, and structures are useful in achieving value-based pricing; that doesn’t make them the same as the concept itself.

Hence, the “based” within the term “value-based pricing.” Value-based pricing is an approach to pricing that is based in the concept of value from the customer’s perspective. Its aim is to achieve the price which most accurately reflects the value that customers associate with the offering.

Given that value-based pricing is not a specific tool, methodology, or structure, operationalizing value-based pricing is challenging. Two major challenges that must be addressed by any specific approach toward value-based pricing are (1) measuring the perceptions of value and (2) understanding variations in those perceptions. Let’s take them in reverse order.

**Perceptions Vary**

Different customers will perceive different benefits and prices differently.

Notice that we carefully mentioned perceptions in defining value itself. Value is not necessarily an objective entity. Some customers may perceive a specific offering as having great benefits to them, while other customers will see all offerings within a category as delivering the same set of benefits. Some customers will perceive the price as the price paid, others may perceive it lower in anticipation of using a rebate or coupon. These and many other variations on this theme have been identified, studied, and used.

Moreover, the maximum price a firm can extract from a customer depends on the alternative under consideration. If the firm can shift the frame of reference, it can shift its pricing power. Or, if customers have a broader array of alternatives, then they may find an approach which leaves them far more net-value positive.

The variation in perceptions between customers of benefits, prices, and alternatives implies that value-based pricing aims for customer-dependent pricing. In economic terms, that would be called perfect price discrimination, which brings us to the other challenge.

**Perceptions are Hard to Measure**

Since the time of Arthur Pigou, no informed and rational person has stated that perfect price discrimination is possible. The effort required to know every individual customer’s perception of an offer’s differential value exceeds the value which would be captured in those transactions. Even measuring one person’s perception of differential value is difficult.

Researchers have devised many ways to estimate customer’s willingness to pay. Each of these techniques and approaches help managers get closer to the goal of value-based pricing, and anyone striving towards that goal can legitimately claim to be doing value-based pricing, but none of them reach that goal for every customer. They merely get a firm closer to it. The goal is to help narrow the uncertainty around the price that most reflects the value customers are willing to pay.

**Defining Value-Based Pricing**

Hence, we arrive at a slightly more precise definition: value-based pricing is a philosophical approach to pricing that aims to price offerings according to the value customers associate with the offering in comparison to its alternatives. It really is that simple—but getting there is not.

**References**

- I have used this definition of value in many presentations. More recently, Anderson, Kumar, and Narus have used this same definition in their book *Value Merchants.*