

# Cost, Price, and Perceived Value

How can we deal with these to meet the needs of widely varying customers?

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*Scientists are accustomed to dealing with things and facts, but most aspects of value relate to perceptions of image, service, talent, and economic use of time. It is particularly frustrating to sell to academic scientists because many place no economic value on their own time or their co-workers' time. The time that vendors must spend to develop products, procedures and an awareness for both are also seldom considered. As a result of this, many academics spend more money than they should because they drive up costs by expecting more than they should. The author has been on both sides of this, as a buyer and a seller. He makes some observations and a few suggestions. This problem will not be solved in the foreseeable future, but analogies with the computer industry may be helpful.*

One issue in our industry is the fact that we continue to “bundle” many cost features into a single price. About 15 years ago, the same issue was raised by the computer industry. At the time, computer companies bundled software with hardware, with maintenance, with training, and with proprietary R&D. A few renegade businesses began to offer these features independently and at much lower costs than the traditional industry could organize given its complex and refractory overhead. In the jargon, the computer industry became “unbundled” and now customers have a far wider choice at higher efficiency. They buy what they need and don't buy what they don't need.

When BAS operates with a fixed price list, we are bundling in costs of R&D, sales, manufacturing, demonstrations, customer training, employee training, applications support, documentation (manuals, *Current Separations*), health insurance, retirement, and the cost of capital. Is there the possibility of being more flexible to the benefit of both our customers and our investors? There are some possibilities.

## **Pay Up Front**

For years we have given a strong incentive to customers who pay in advance. Prepayment reduces our need for capital, reduces our cost of collections, and minimizes the risk of cancellations. This has been well accepted by customers in a position to take advantage of it. Some organizations (foolishly) don't permit it. When this is coupled to a money-back guarantee, everyone is clearly a winner and prices are reduced. This is how milk and beer are sold—for good reason.

## **Rent or Lease?**

Many of our customers are from non-profit “tax free” institutions. They typically do not depreciate equipment in their accounting systems. Other customers (industrial firms, commercial clinical laboratories, contract laboratories, start-up companies) would prefer to pay for our products over time via “rent to own” or various leasing schemes. This enables the customer to better manage cash flow such that payment for an instrument is better linked to income derived from the in-

strument. We have made this one of our standard financing options. For years I have been baffled by the fact that universities finance buildings, but do not seem to finance instruments over their useful life.

## **Demonstrations and Installations**

While some customers insist on a demonstration at their site, some do not. Demonstrations are not free. On average, it costs BAS perhaps \$2,000 to demonstrate a \$10,000 instrument. Should those who do not require a demonstration help to pay for those who insist on it? Probably not, but we have no way to control this. The same situation holds for installations, which cost a great deal. Should customers who do not require an installation (for example, those buying a second or third copy of the same unit) pay for those who do? Should installations be charged for and unbundled from instrument prices? We think they should be and we are doing so. Should customers who bypass a demonstration be given an incentive to do so? Could comfort

be assured by substitution of a “money-back guarantee” in place of a demonstration for qualified laboratories pursuing qualified applications with qualified people?

We have many customers who are quite uncomfortable with chemical measurements. Psychology, physiology, and pharmacology are a few of the fields where chemical determinations are frequently required, where such measurements are necessary, but the means of making the measurements are not central to the field. We have other customers for whom chemical measurements define their areas of expertise and interest (electrochemists, liquid chromatographers). One class of customer values training and applications support. The other class of customer values only hardware specifications, performance, reliability, and access to service.

### ***Let Us Do It***

Many (most) of our customers are not very interested in our methodology, but are very interested in what this methodology accomplishes. Perhaps such customers would be best served by not buying instrumentation, but rather by contracting with us to process their samples. Industry calls this “outsourcing.” Does it always make sense to invest in an instrument and pay for the salaries, supplies, and services to keep it going? We know our instruments and methodology better than anyone else. We can often process samples (lowering anxiety, increasing speed) and help get the data required to renew a grant or bring a product to market. We now process 10,000 or more samples in a typical month and all of them are paid for.

I have seen customers buy BAS technology from us (or others imitating BAS) and spend a great deal of time and money over a year or two and still not process samples efficiently. Often, time and money is wasted because of inadequate

training and a tendency to follow recipes and rumors from others who also do not really understand how to troubleshoot problems (or even correctly prepare a mobile phase). Some of these groups have been misled to spend \$50,000 or even more on detectors alone (meaning nearly \$100,000 on a complete autosampler LC with a data system) and yet they are still not getting quality data. Even a modest \$25,000 instrument requires a minimum \$25,000 payroll cost to keep it going and easily \$2,500 annually in supplies and service.

Since it is expensive for us to process samples (\$30-\$100 each or more, depending on the analyte(s), the number of samples, and regulatory requirements), we cannot often deal with less than 100 samples because our price includes instrument set-up, standardization, QA, and report preparation. Think also how much it costs to not have data, and how much more your people can do when they are practicing their own profession instead of trying to be analytical chemists.

When we process samples, our chemists are blind to the variables of your experiment, adding a degree of independence which can also be helpful. Granting agencies have increasingly recognized that specialized service (peptide and DNA sequencing and synthesis, for example) is a justifiable budget line item as an alternative to costly equipment and personnel. With carefully designed experiments in your lab, processing samples in our lab can be very cost effective. Why else would we be doing more than 10,000/month? Why else would we be adding the space, equipment, and personnel to triple this number?

### ***The Product Does Not Exist***

There are occasions where the products and services BAS offers simply do not fit the situation. In these cases, we have modified instruments, written customized soft-

ware, developed analytical methods from scratch, applied for joint grants with our customers, and even produced instrumentation under the name of another company who will market the product. In these cases, our scientists and engineers must be paid for their time. One point academics frequently miss is the fact that custom modifying a unit by removing a feature almost always raises the price. This is perfectly logical to anyone who has worked in manufacturing or inventory control, but a mystery to most others. What would it cost to buy a textbook with several chapters removed? More than the original, not less.

### ***Applications Support***

We do pride ourselves on applications support, meaning we frequently are called on to assist customers with the “soft issues” of achieving success, such as optimizing instrument conditions, providing literature references, helping with software, helping with sample preparation advice, and even recommending vendors of complementary products and services. This is where much of our value is added, but we are having trouble with this because it costs a great deal. Should the purchaser of an LC column get the same assistance as a purchaser of a \$30,000 LC system? I do not think so. Should the assistance be “free” for years after a purchase?

Going back to the computer analogy, many software companies now use “900 number” service lines where charges are added per minute. Some use a fixed time such that you receive, for example, five hours of “help” before you are billed. Other firms charge an annual maintenance fee whereby the user is entitled to support as well as “free” upgrades. All of these are possibilities and BAS is seriously considering them. It appears that we can be most fair to all customers if we charge for what customers use and not for what they do not use.

### ***Let's Have Some Fun***

When you think about these issues on a grand scale, you cannot help but think there should be a BAS VISA® Card. You should get frequent flyer miles on major airlines when you buy any item from BAS or send samples to BAS Analytics. We should give you free service if you switch from MCI to BAS. If you have enough BAS points you could upgrade to a gradient system from an isocratic system. For every order for fifty

packages of dialysis probes, I can send you a toaster. It is amazing the nonsense that goes on in consumer marketing. We are all treated like rats in a psychology experiment.

### ***Conclusion***

In this brief report, I have raised issues which suggest that we could have a lot more flexibility in the way our customers pay for products and services. I would value input from our customers and prospective customers on these points. I

look for other suggestions as well. How can we all win in this time of limited resources for basic research? One thing is for sure. No one should assume that we cannot be flexible. We should always talk about the customers' particular circumstances in terms of application, budget, timing, and so forth. I do not mean to offend anyone by this opinion piece. After all, when I was a full-time professor, I did not consider these issues either.