

HOW TO DESIGN AND IMPLEMENT SUCCESSFUL PRICING RESEARCH

COUNSEL & CAVEATS FROM THE TRENCHES

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I often confess to clients who inquire about price sensitivity measurement that I have deep reservations about it. I tell them that it's one of the areas in marketing research where our tools and techniques seem often to fail us -- or, at least, to seem especially disadvantaged -- because price is so emotionally and intellectually charged a concept for both the buyer and the marketer. To arrive at some meaningful assessment of perceived price-value, one has to leap over *two* hurdles: first, the challenge of requiring people to make a trustworthy prediction about their purchase decisions; and second, the unreasonableness of expecting people to compute and signal a tolerance for varying levels of expenditure in a way that is both self-aware and candid. Still, as one client reminded me long ago: Either I guess *alone* ... or I guess with your help. And when it was put like that to me, I realized that my allegiance lay on the side of imperfect research when the alternative was clearly no research at all.

I think all of us treat pricing research as a kind of due diligence, recognizing that sometimes, all we have to offer our clients is a conscientious, well-documented guess. If this seems a nihilistic note on which to address the professional pricing society, let me say simply that I am here to counsel realistic expectations and, in general, to make the case that high tech doesn't necessarily equate to high levels of pricing confidence.

Pricing is, in my experience, a sort of intellectual negotiating process tied closely to

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product positioning. From the very first, you are asking consumers one of several things: whether the *extra value* they will receive is substantial enough to justify a premium; or, as the case may be, whether the *product deficit* warrants some pricing concession; or indeed, whether a discount per se is sufficient to secure market advantage, all other things being equal. (Of course, all other things rarely are equal since, if nothing else, inertia makes some products more equal than others.)

PRICE SENSITIVITY MEASUREMENT

- “Asks *permission*” to charge higher prices for added value without loss of sales
or
- Seeks *confirmation* that discount pricing will increase, not depress, revenues (i.e., is not a gratuitous concession)
or
- Seeks *reassurance* that the discount is an adequate concession, in light of product “deficits”

In any case, the way you conceive the pricing question in your head presumes an ongoing marketing strategy and a frame of value reference that tells you what price ballpark you are in.

Marketers *usually* know, or at least *sense*, at the outset whether, in general terms, they have an improved product, a parity product, or a disadvantaged one. And they also tend to know the context and the relevant benchmarks for evaluation, even if the product is an innovative one. For example, anti-lock brake systems are a clear improvement over conventional brakes. A once-a-day drug is preferable to a three times per day drug. And cappuccino is worth more than your ordinary cuppa jo -- at least *I* think so, although I suppose there are segments that may not share my addiction. But, in general, after investing time and money in development, you have, or *should* have, a feel for where you are on that pricing curve -- the neighborhood, if not the precise street.

In all fairness, however, progress does not always proceed in a straight line, and there are sometimes little tradeoffs in product design

that may blunt or qualify the value of a product improvement. In the pharmaceutical arena, for example, improved efficacy may bring with it more toxic side effects. Some early color printers were slower to print and quicker to jam. And an instant camera is still *generally* not the weapon of choice for more artistic photographers. Even so, I get a little anxious when my clients ask to test a pricing range that encompasses a 25% discount and a 50% premium. I call that *prurient interest*, not *due diligence*.

THESE QUESTIONS PRESUME AN ONGOING MARKET STRATEGY AND A FRAME OF VALUE REFERENCE

- Marketers *usually* recognize (or sense) at the outset whether they have an improved product, a parity product, or a disadvantaged one
- They also *tend* to know the benchmarks and context for evaluation -- even for truly novel products
 - Price-value of competing products
 - Price-value of alternative technologies
 - Cost/penalty to customer of doing/buying nothing at all

Pricing research should be thought of more as calibration than discovery. It is, ideally, a vehicle to confirm: “Are my assumptions about the basic product positioning correct?” *How much* extra value do I deliver, *and to whom*? *How much price incentive* must I give to compensate for recognized shortcomings -- or for the luxury of being just like those who preceded me?

It’s also a vehicle for identifying any emerging changes in the market context that are threatening to alter the frame of value reference. This last issue deserves a quick comment because a change in the frame of reference is precisely what happened to all my clients in the pharmaceutical industry who experienced a paradigm shift (forgive the phrase) from what seemed like the decadent, permissive luxury of cost-plus pricing to the more austere draconian rule of pharmacoeconomic outcomes. Once able to command a premium for convenience, or even for novelty alone, the drug companies are now selling to institutional decision-makers who ask only: Does it save money? And second, does it improve outcomes ... *thus* saving money. The drug industry is engaged in the truly unique

enterprise of having to *prove* the life-saving value of its products via unpredictable outcomes studies that may take many years to complete. Failing that, they're having to attach an economic value to soft, subjective product benefits like quality of life. This can really be a nightmare for companies who must begin the rudiments of a pricing process long before they know whether or not they even have a marketable product.

The drug industry is a rather dramatic example of upheaval -- but other industries and product categories contend with less volatile disruptions and cultural rule changes all the time. Right now, Ford is offering Probes and Mustangs at discount prices to clear the lots, but they're finding that they don't need to yield an inch on the Explorer. Why? I'm convinced it's because the Baby Boomers now have teenage kids who didn't get to play with war toys and tanks as children, and whose hormones now throb to the siren call of all-terrain vehicles. (I would have sold my soul for a Mustang way back when. Go figure.)

KEY OBJECTIVES FOR PRICING RESEARCH, THEN, ARE CONFIRMATION AND CALIBRATION

- Are my *assumptions* about the basic product positioning *correct*?
- How *much* extra value do I deliver?
- How *much* price incentive must I give to compensate for shortcomings -- or for parity?
- Are there *emerging changes* in the market context or culture that may be altering the *frame of reference*?

Arguably, price is one of the most important decisions a marketer ever makes. Yet the very first question you have to pose in contemplating pricing *research* is whether or not to actually bother. Not every pricing decision requires marketing research per se -- or at least not *primary* market research. Arguably, in fact, much of the pricing research we do is conducted for essentially political reasons; not so much to educate or inform the product management team as to validate their decisions and persuade or disabuse senior management -- who are fre-

quently removed from the marketplace by a few layers of responsibility, and sometimes even by a few continents. That *political* agenda, by the way -- the search for empirical proof that a new product or a new technology can't command the margin everyone is hoping for -- that's often how we come to have sensitivity curves straddling price points from the sublime to the ridiculous -- you know: the 30% discount to the 50% premium. Conscientious marketers want to be prepared to field any price question their managers might pose, sometimes at the risk of compromising the validity of the data they collect by pursuing too many, or too diverse, a set of price options.

While it's hard to argue against what I've called prurient pricing interest without sounding like a prude, there really are some instances when pricing research is gratuitous. Examples include categories like cereal, where price decisions involve splitting hairs (or grains) and pennies, and where market experience or econometric data are worth more than primary research. Obviously, the easier it is to lower the price or pursue price-promotions after-the-fact, the less crucial the initial pricing decision really is. Arguably, you'd prefer to get it right the first time, but we all recognize that "getting it right" may actually take more than just a survey. And in fact, there are times when nothing short of test market experience can tell you how buyers or users will judge the *sustained* value of a new product through multiple uses and environmental adaptations. It's hard to predict whether they'll really want to pay a regular premium for certain items until the novelty wears off.

The problem is even more challenging when people simply can't grasp or relate to the products being offered. Today's cyber-surfers (and especially those too timid to even put a toe in the water) can't really tell us yet how much various on-line services are really worth to them; business decision-makers contemplating the price-value of new network options and other advanced connectivity features are equally hard-pressed to apply known valuation principles.

For similar reasons, even our *clients* in those innovation-driven industries sometimes struggle

to find even the pricing ballpark much less home plate. Unfortunately, then, pricing research in an evolving or emerging category can become controversial: One either defers it altogether or prepares to do it over and over – regularly and often, like dental prophylaxis – until the market stabilizes.

THE FIRST QUESTION TO ASK IN CONTEMPLATING PRICING RESEARCH IS *WHETHER TO BOTHER?*

- Elaborate pricing research may actually be unnecessary in a well-charted category, especially if ...
 - Potential price variations are subtle
 - Econometric data and market experience are reliable compass points
 - Price promotions are an easy option -- or a requirement
 - Buyers cannot make reliable assessments or predictions of product value

It's also been my experience that formal pricing research is of limited value in a category where there are already algorithms in place for assessing price-value -- typically, cases where a product is designed to replace or obviate processes, people, or other products at some calculable cost savings. If you know anyone who has ever had a gall bladder removed and been home in just a day or two thanks to scope surgery, you can imagine how the resulting cost saving gives rise to a sort of formula that can be used to calculate an acceptable annual price ceiling for laparoscopic instruments. Pricing research is, in fact, more important when we want to impose a *premium* for innovation but we are not sure what monetary value people will attach to convenience, comfort or even life-extension.

WHETHER TO BOTHER

- Formal pricing research may be of *limited value* in a category or industry where known "algorithms" for assessing price-value are already in place ...
 - Product is designed to replace or obviate process, people, or other products at some calculable cost savings
- And, it may be *moot* in cases where we can easily establish *lack of interest at any price*

If pricing research is more or less useful, one can argue that sometimes it is flatly irrelevant. My favorite kind of irrelevant pricing research is research conducted to establish the price-value of a product or service among customers who are disinterested at any price. That may sound like the kind of bush league error no one makes but, on the contrary, people occasionally attempt to run before they can walk, propelling themselves headlong into pricing research before they have established that, indeed, they are fixing their sights on the appropriate customer group.

The temptation to pursue price rather than simply interest as an object of inquiry is sometimes irresistible. I can recall one focus group many years ago with a bunch of truck drivers who were assembled to give us their reactions to several appliances meant to be run off cigarette lighters. After the drivers in the room flatly declared that they had neither the space in their cabs for the prototype, nor the outlets to run it, I received a scribbled message from my viewers behind the one-way mirror. Can you guess what it said? ... "Ask them what they'd pay for it." The ultimate intellectual hiccuph.

A similar thing happened recently when a company expressed interest in asking primary care physicians the price-value of a new therapy to be labeled for an obscure disease that those physicians do not generally treat. The moral: Before we embark on the costly rigors of quantitative pricing research, it's generally a good idea to assure ourselves that we have targeted an audience whose price-value assessments are truly worth soliciting.

PRICING DYSFUNCTION



Yes, I understand ... but if you *did* have a driver's license, and you *did* want to buy a car, and you *did* consider a sport utility vehicle, how likely would you be to pay \$800 for the Eddie Bauer model?

Once we've decided that we have sensible pricing questions to ask and we know who to direct them at, the next issue for us to contemplate is:

What are the risks? I think all of us are intrinsically suspicious of pricing research because there is something just a little adversarial -- or perhaps sadistic -- in it. The fact that it appears to enlist the cooperation of customers in an attempt to wring more money from their wallets seems almost to violate the first amendment right against self-incrimination. And indeed, we do try to structure these exercises so that people can't rig the game against us in self-defense. But we can't usually be coy enough, and under some extreme circumstances, the process can take on a kind of futile self-defeating quality, as when a small number of savvy professional buyers seek to actively influence the research outcome through "pricing dialogue." Two can play the game.

This phenomenon occurs quite frequently in highly leveraged markets, where a remarkably small number of purchasers can call quite a few of the shots. What adds to the complexity in markets like these is the fact that there really is no single published price. In these settings, price is not a discrete point -- or even a fixed starting point -- but rather, it's a variable outcome of the negotiating process. That means it is difficult for you, as a marketer or a researcher, to ever map the pricing landscape. If you don't know precisely what a customer is actually paying for his system, it's hard to know what his acceptance or rejection of a given price point really means. We have seen clients think they were offering a discount only to discover belatedly that they didn't understand enough about the actual prices in the marketplace to know how a discount would be defined.

The process is further complicated by the fact that when many goods or services are being offered by a single supplier, the price of individual items or components in a portfolio is obscured by contractual bundling. If, for example, I am a drug manufacturer who wants to know how to price a new drug for asthma, I may

find that my customers are hard-pressed to give me feedback because they themselves are not quite sure what they are paying for competitive agents -- particularly if those drugs are supplied by manufacturers who bundle them with other products. The background noise on pricing rises to the level of a dull roar when we take into account the inclusion of "value-added" -- read: free -- services, which represent de facto discounts on one or more of the products in the bundle.

THE SECOND QUESTION TO ASK IN CONTEMPLATING PRICING RESEARCH IS: WHAT ARE THE RISKS?

- Pricing research may be dangerously unreliable in a market where ...
 - A small number of savvy professional buyers seek to influence research outcomes through "pricing dialogue"
 - "Price" is variable (i.e., driven by "contracting"), and different prices are negotiated for different buyers and segments
 - Price of individual items or components in a portfolio is obscured by contractual bundling

The process becomes yet more complex, and our attempts at research more hazardous, when we find ourselves dealing with multiple decision-makers whose roles and interactions are unclear and subject to change or variation. When we conduct pricing research in the drug industry, we first confront the fact that *physicians prescribe* the drugs, *patients buy* the drugs, and insurance companies or managed care plans reimburse for them (if the patient is covered.) So who, in fact, is at the controls here? Certainly we worry about our big customers, the managed care plans who pay for drugs by the gross. So we go to them for *permission*, as it were, to charge a premium -- having first checked with physicians, usually to ensure that they will care to prescribe the drug at any price. The managed care folks, meanwhile, are trying to reconcile their own profitability requirements with the preferences of the patients they serve. But the patient doesn't necessarily get a chance to state, or even form, those preferences because when you join a healthcare plan, you check that privilege at the door Well, sort of, except that sometimes we *do* ask patients their opinion on price in the belief

that, just maybe, we can take to the airways with direct-to-consumer promotion or public relations campaigns and force patient involvement.

So pricing research in today's health care environment often requires at least three on a match. And if I tell you that even this depiction is a stunning oversimplification of the problem and the process, you'll quickly understand why pricing research in healthcare has become one of the most complex enterprises I've ever seen, requiring plebiscites with patients, physicians, pharmacists, insurers -- you name it. And since no group is clearly in charge, the process of integrating the data to arrive at some meaningful decision across all segments and insurance scenarios is extraordinarily difficult. Those of you in the audience who can define your customers clearly are truly among the blessed.

Professional buyers can be challenging to deal with but it is equally difficult to conduct valid research at the *other end* of the spectrum -- that is, where customers are not price-expert but price-ignorant. Consumers who are asked to calculate the price-value for brand new telephone or computer services will be hard-pressed to help you -- not only because they do not necessarily understand the value of your product but equally important, because they do not fully understand the cost of the existing products it will replace or compete with.

As a matter of interest, we are encountering a new kind of pricing research risk in this age of tight-knit electronic communities: the risk of inflaming community sensibilities by the very *act* of testing prices. For example, if we were to consider testing prices for a new drug among AIDS patients -- a population known for its unusual proactivity and the understandable inclination to speak out or penalize companies they feel have exploited their plight. Notably, however, there are many other national and international patient groups yoked by computer, and the process of soliciting their opinions about the price of new therapies is frequently a sort of "goldfish bowl" research conducted unwittingly in the

glare of public, or semi-public opinion, with all kinds of potential for backlash and fallout. Word about your objectives and your price points can spread through the community when you solicit respondents on the Internet only to find that these people commune fast and furiously with one another. And at hypothetical price points of \$12,000 per year for a heroic therapy, everyone from patients to stock analysts may be abuzz.

... WHAT ARE THE RISKS?

- Conversely, it can also be unreliable when it targets customers who are *price-ignorant*-- a common problem, particularly in rapidly evolving markets with complex product bundles
- It may actually damage company/product image in a market environment where the very act of pricing research may seem exploitative
 - "Break-through" cure for fatal disease
 - Community of networked customers

Even once you're persuaded that pricing research is, in fact, more useful to you than it is dangerous, there are a few other questions to be resolved. Consider, first, what is your objective: Is it a demand forecast, a pricing decision, or is it essentially just positioning? These aren't always distinctions with a difference because all three are often closely intertwined. Since price is a key demand driver, we cannot, pursue a sensible measurement of demand without stipulating a price point. And conversely, it is difficult to conduct meaningful pricing research without incorporating some measure of demand as a dependent variable. That is not to say that pricing research always produces a trustworthy, absolute measure of demand or that the two can be made to serve the same masters without compromise, but it's generally advisable to *try* for integration.

Pricing research and positioning research also march in tandem -- or should -- but, the interdependence is often ignored or overlooked, as if one could somehow isolate defining product benefits from the premium one pays to secure them. Again, while it's possible to pursue price and positioning simultaneously, it is generally a

good idea to decide which objective is more important to you and which one should therefore have the right to set the terms of the research. I can't be specific in my counsel without being oppressively tactical but a good consultant will encourage you to state your priorities.

**THE NEXT QUESTION TO ASK:
IS THE GOAL A DEMAND FORECAST, A PRICING
DECISION ... OR JUST POSITIONING?**

- **Demand forecasting and pricing research often march together**
 - Since price is a demand driver, there is no sensible measurement of demand without it
- **Even so, what passes as pricing research is often really positioning or product design research *in drag***
 - "Applause meter" for gauging response to various features
- **Consider your priorities: The fine points of research method are often dictated by emphasis on one goal or the other**

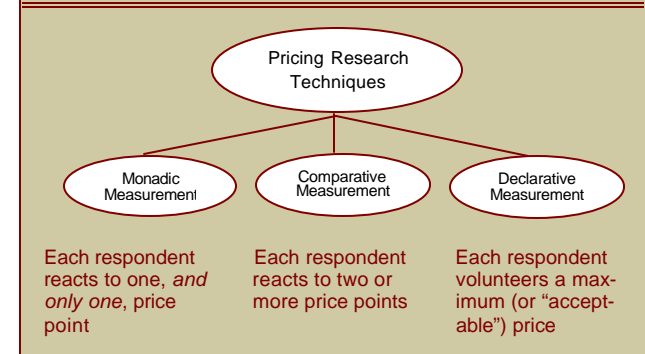
Having said quite a few dire things about the perils of pricing, I owe you some explicit and constructive how-to's if I am to sing for my lunch this afternoon. The first to point out is that good pricing research follows the same basic principles as good market research generally: You want to be sure that you use sound principles of survey sampling and then craft a thoughtful, unambiguous instrument of measurement. Unfortunately, pricing research is not like taking air or soil samples. The very act of measuring price sensitivity can cultivate or distort it.

Virtually all pricing research designs fall into one of essentially three types: monadic measurement, comparative measurement, and what I like to call declarative measurement.

In monadic designs, each respondent is exposed to one, and only one, price point for any given product. In comparative designs, each respondent is asked to react to two or more prices. And in declarative designs, each respondent is asked (for one or more than one product) to volunteer his or her *own* price -- one that is maximum and/or reasonable, acceptable, etc. Note that comparative testing is not to be confused with a design that asks customers to choose between Product A at one price and Product B at another. Comparative testing asks

people to evaluate Product A first at one price and then again at a second price -- whether or not they are also asked to or evaluate a competitive Product B.

VIRTUALLY ALL PRICING STUDIES FALL INTO ONE OF ESSENTIALLY THREE CATEGORIES



I want to be forthright in stating a personal prejudice of mine right up front. In an ideal world, we would always -- or nearly always -- rely on monadic tests for pricing research. The reason I prefer them (at least in theory) is based primarily on the risks of showing our hand by exposing respondents to more than one price. As soon as they become aware of our objective, they are likely to second-guess the process, demonstrating greater price sensitivity than we might otherwise see. Comparative measurement is, in general, a more sensitive -- arguably a more *hypersensitive* -- gauge of just about anything than monadic testing because it poses options that might not otherwise be visible. Under ideal circumstances, we would never cue customers about our pricing objectives or announce more than one of the price contingencies we are considering.

MONADIC TESTING IS THE THEORETICAL IDEAL

| Advantages | Disadvantages |
|---|---|
| <ul style="list-style-type: none"> • Least "reactive" or provocative -- respondent is unaware of price testing and oblivious to other price options • Less risk of "leaving money on the table" | <ul style="list-style-type: none"> • Requires larger sample, larger budget • Increases sampling error, reduces statistical reliability • Can produce "irrational" curves |
| | <p>The graph shows a line with three data points at price levels \$25, \$50, and \$75. The curve starts at a low point at \$25, dips further at \$50, and then rises at \$75, forming a non-linear, 'irrational' shape.</p> |

Monadic measurement is, however, a statistical luxury. It requires a larger sample and thus, a larger budget. And where the universe of decision-makers is relatively small, monadic designs are, frankly, not an option, even where money is no object. Because monadic samples tend to be smaller, the result is an increase in the sampling error around our estimates and reduction in statistical reliability. In fact, monadic designs can produce what look like “irrational” price curves because of slight response variations across groups that are attributable to sampling error. In this essentially flat curve on the slide (produced by testing each price with a different subgroup), it appears as if people prefer to pay \$75 than to pay \$50 for the same product, but in fact, all three estimates fall within the same confidence interval. Curves like these are esthetically and psychologically displeasing to management; they require some explanation and indeed, if the sample design isn’t adequately powered (that is, the cell sizes are too small), the resulting measurement is arguably *hyposensitive*.

Comparative testing of one flavor or another -- and there are several -- is far more commonplace than monadic because marketers do not always have the budget or the latitude for monadic tests. With the license to secure more than one price judgment from any given respondent, you can test a larger number of price points and thus obtain a more sensitive and robust pricing function, with less need for interpolation and less concern about irrational curves. (We can still get irrational functions because people sometimes distrust a lower price, but when it happens in a comparative design, it is an authentic phenomenon, not an artifact of sampling error.)

Comparative designs also permit the use of other, more versatile methods. For example, conjoint analysis -- which really requires a large number of judgments in series -- is a special case of comparative measurement. As I suspect most of you know, conjoint analysis is particularly useful when the product itself is undefined and we need to solicit pricing judgments for a series of hypothetical product designs or marketing

contingencies. This is more often the case in technology-driven industries where we can engineer a variety of different capabilities or innovations and/or we may not know the contours of a new product until the conclusion of lengthy clinical trials.

The downside of comparative measurement is the fact that often -- though not always -- our measurement goals are transparent to the respondent, and measurement sensitivity can be inflated by the conspicuous presentation of different price points. This is certainly the case in simple comparative measurement schemes where we ask people to evaluate two or three successive price points. Arguably, if all you are manipulating is price, it is best to begin with the highest point and move progressively down the scale rather than up, because there’s a rapid learning effect and people will be reluctant to convey interest in a product once they believe it can be bought for less. Even so, one can argue that no matter how you sequence your price points, the second judgment is always distorted by the first, and that the third (or any judgment thereafter) may not be trustworthy at all.

| COMPARATIVE TESTING IS COMMONPLACE BECAUSE MARKETERS DO NOT ALWAYS HAVE THE BUDGET OR THE LATITUDE FOR MONADIC TESTS | |
|--|---|
| Advantages | Disadvantages |
| <ul style="list-style-type: none"> Increases number of points one can reasonably test → more sensitive pricing function Larger sample increases <i>statistical</i> confidence Permits use of other more versatile methods (like <i>conjoint</i>) Especially useful when product itself is still undefined, and numerous pricing contingencies are required | <ul style="list-style-type: none"> Measurement goals are transparent to respondent Sensitivity is inflated by process and price options |

Exasperated by the limits and constraints of both comparative and monadic design, researchers sometimes seek refuge in what I like to call declarative approaches. In this third type of study, respondents are exposed to a product profile and asked to declare a price that they perceive to be acceptable or realistic -- or the maximum that they would pay. What attracts some researchers to this approach is that it seems to deflect attention from the “would you

buy” question, forcing people to provide their own valuation, using price as a metric. There is something appealingly “real” and forthcoming about this kind of question. Collusively, it asks: What do you, as a consumer, believe that this product is really worth to you? This has proven helpful when our clients are truly unable to define a sensible range for complex innovations, although un-checked, it places too much freedom in the hands of customers who are often equally disadvantaged.

| RESEARCHERS SOMETIMES “SEEK REFUGE” IN DECLARATIVE APPROACHES | |
|--|--|
| Advantages | Disadvantages |
| <ul style="list-style-type: none"> Establishes price <i>ceiling</i> for each customer | <ul style="list-style-type: none"> Reduces consensus or data convergence Uses price as a metric for purchase interest, often confusing “willingness to buy” with “perceived value” |

In setting price groundrules, unfortunately, the declarative measurement principle -- though seductive -- is not without its deficits. First, it produces a scatter plot rather than a price sensitivity curve, since it elicits a smaller number of judgments or observations for each price in what is a theoretically larger set of points. Because those points are self-defined, there is less consensus or convergence in the data.

Another related shortcoming is the fact that in using price as a kind of metric for purchase interest, we’re confusing willingness to buy with judgments of value. If we ask someone *what he believes a product is worth*, it’s not quite the same as asking whether or not he would actually buy it at that price. Nor does it tell us the likelihood that he would buy it at a slightly higher price. If instead we ask someone, *what is the maximum price* at which he would buy a particular item, we can assume there is no real likelihood of purchase above the ceiling -- but it can’t necessarily be assumed that the customer would actually buy it at, or even below, the stipulated

ceiling price either. Allowing people the freedom to set zero, or some unrealistically low number as a purchase price, produces a pricing function which, in my view, is stretched thin to the point of irrelevance.

Because comparative measurement is the most common of techniques in one form or another, it justifies a more detailed discussion about the options available to those who use it. A comparative task can be structured in several different ways. First, you can ask consumers to make a price-value judgment about a product in isolation. The simple example noted here, Would you buy a Ford Taurus at \$18,000?, appears to leave the competitive context vague and undefined. It fixes the product and varies the price, begging the question of what other options are available to the respondent and what they might cost. In a marketplace in which there are no other competitive options -- or conversely, those options are well-understood and essentially stable -- it might be legitimate to pose the problem in this fashion, but it is usually inappropriately simplistic.

We know, in fact, that purchase decisions are generally made in a rich, often fluid context, and it’s usually more realistic to pose the problem in a way that (1) makes the context explicit and (2) examines the price-brand interactions. We can pose a series of market scenarios by giving sets of competitive products -- each at designated prices -- and then invite respondents to choose a preferred product from each of the sets. For example, if a Taurus is available at \$18,000, a Camry at \$16,000, and a Civic at \$17,000, which would you buy? These brand-price interaction scenarios can be handled in several different ways and some researchers have given proprietary names to theirs, but the basic concept is essentially the same. The market *scenario* approach tends to be a more realistic way of framing the problem -- so long as the relevant options are represented -- and it solves one critical deficiency of many pricing designs by explicitly defining the comparative pricing context.

While it’s certainly true that consumers make some real life decisions without full knowledge

of price (and may, in fact, pay different prices, depending on how and where they shop), it's usually preferable to provide the information if we are in doubt, rather than leave the matter open. Remember that research respondents are never quite like actual purchasers; among other things, they are usually less well-educated about the options they will encounter in the real world because they haven't necessarily put in all the leg work to arrive at an informed decision.

COMPARATIVE MEASUREMENT CAN TAKE SEVERAL FORMS

- **Fixed product in isolation:** "Would you buy a Ford Taurus at \$X... at \$Y?"
 - Leaves competitive context vague and undefined
 - Fixes product; varies price
- **Product-brand tradeoffs:** "Would you buy a Ford Taurus at \$X if a Honda Civic is \$Y?"
 - Varies prices and brands in a defined market context
- **Conjoint and other tradeoff techniques:** "Would you buy a Ford Taurus with leather seats at \$Y if a Honda Civic is \$Q?" ... etc.?
 - Treats price as one of several demand drivers
 - Establishes price utility for each
 - Obscures (or mutes) focus on price
 - Supports new product design efforts

The nuances of real world deliberation are sometimes better captured in a conjoint design, where we treat price as one of several demand drivers and we develop utilities for each variable, including price. Just a quick primer for anyone new to the concept: conjoint analysis treats products as bundles of attributes which can be systematically manipulated. Respondents are asked to rate various permutations, or product bundles, and then -- based on the variability in these scores -- we are able to draw inferences about the importance of each attribute, as well as the appeal of each attribute *level*. In automobiles, for example, we might test attributes such as seat upholstery, anti-lock brakes, CD-player, or price; we can determine the importance of each one as a driver of demand by observing what happens to respondent ratings or judgments when those attribute levels are systematically varied -- that is, for example, when we change price from one level to another or we replace cloth upholstery with leather.

Conjoint analysis has some very nice features, including its role in supporting new product design efforts and its capacity to simulate demand for attribute bundles we haven't explicitly tested.

It places price in a total context of demand drivers and helps us to determine how important price truly is relative to other product attributes. In fact, by varying those other attributes, conjoint tends to obscure or camouflage our focus on price and can thus reduce some of the hypersensitivity or distortion we associate with comparative measurement. Generally, we sometimes go so far as to utilize a conjoint design to measure price sensitivity -- merely for the purpose of deflecting attention from the pricing component of the analysis -- even when we're quite persuaded that we know what our product looks like. In all fairness, however, I should point out that as useful, and as slick, as conjoint can be, it, too, has the potential to distort price sensitivity by conveying the full range of price options at the outset. The counter-argument is that because other product features are also varying at the same time, respondents are not usually being asked to rate their interest in the same product at markedly different prices.

Of course, just as there are different ways of structuring the task, there are different ways of posing the purchase question. We can ask people to make a discrete choice: Which of these products will you buy at these price points? Or can we ask them to estimate a probability of purchase at any given price point. Alternately, when the purchase occasions are frequent and repetitive -- for example, drug prescriptions or soft drink purchases -- we can ask respondents to *allocate usage volume* across a *series* of products or brands. And finally, as I mentioned earlier, we can require people to declare a maximum acceptable price, if our focus is primarily on price-valuation with little or no interest in forecasting demand.

JUST AS THERE ARE DIFFERENT WAYS OF STRUCTURING THE TASK, THERE ARE DIFFERENT WAYS OF POSING THE PURCHASE QUESTION ...

- Which of these products will you buy?
- How likely are you to purchase each of these?
- What is the maximum you will spend to obtain this product?

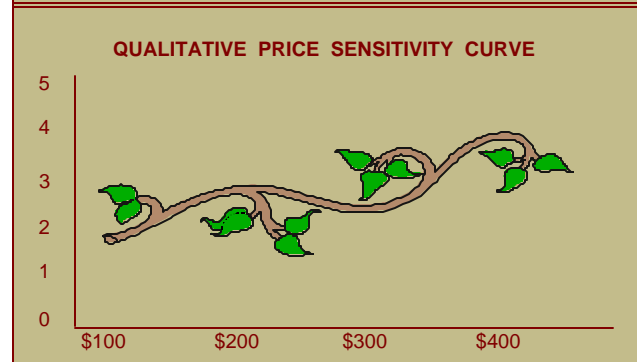
... Consider which approach is most reasonable for respondents given the information available to them, the decision context and the type and magnitude of the purchase

There is no single approach that makes sense for all markets and research problems. Factors to consider in framing the question include the nature of the purchase decision -- is it a major, infrequent purchase, for example, or a recurrent, low budget acquisition? Also important is the decision context and the nature of the competition: Are there varied options with which the product competes and are those options subject to frequent pricing variations? Is the product thoroughly defined and immutable, or will respondents perceive that they require some hands-on experience before making a commitment?

In general, I urge clients and questionnaire architects to structure the question in ways that feel most comfortable and realistic for respondents. Of course, if you offer people the opportunity to state a probability of purchase, you must have ready an algorithm for converting those probability scores to projected purchase decisions in order to compute your revenues. It goes without saying that the bottom line in pricing analysis is the projected revenue stream at any given price. Some *surrogate measure or forecast of demand* is the key to that calculation.

Throughout this discussion, I have made nihilistic reference to some of the pitfalls one can encounter in the course of doing pricing research, but the careful listener will note that many -- certainly not all of them, but many -- can be negotiated with some success if the proper groundwork is laid. Before you trouble to count heads, it is critically important to do the necessary *qualitative reconnaissance*. Qualitative research will help ensure that you are in the right ballpark with your prices and your customers. (Are you contemplating the right range of points and are the people you are talking to even likely to consider your product?) Equally important, qualitative research helps to define the decision context, by revealing, for example, whether buyers understand the product category, recognize and conceptualize competitive products, etc.

REMINDER: THERE IS A PLACE IN PRICING RESEARCH FOR THE SOFT CURVES OF QUALITATIVE ANALYSIS



Qualitative research can, on occasion, *stand in* for quantitative research -- when, for example, there aren't enough heads to count in the marketplace or the product is really a "deal" that's simply too complex to define as a single product or service and too varied to conceptualize at a series of discrete price points.

... QUALITATIVE ANALYSIS

- **Before you count heads ...**
 - Am I testing the right prices?
 - Am I testing the right *product*?
 - Am I testing with the *true decision-makers*?
 - What is the decision context? (e.g., Do my buyers know prices?)
- **In lieu of counting heads ...**
 - When aren't there enough heads to count (<200 customers)?
 - When the "deal" is too complex to capture as a set of discrete points

I want to leave you, in this same cautionary spirit, with some things to explore when you embark on qualitative research or you search your own understanding of the marketplace for guidance in design. Ask yourself: Do customers know the prices of competing products? If they don't yet, but you believe that they would in a real world purchase venue, then you may need to supply them. But remember, educate them only up to the point that you believe mimics reality. Don't over-educate them. In that same spirit, consider whether you are, in fact, capable of supplying the correct pricing context. If there is a different pricing

reality for each customer, then you have to let them supply their own (and hope that they're willing to share it with you). Another crucial question to ask yourself is: can respondents accurately assess price-value based on a product concept or simple prototype? If not, you may need to conduct in-home or in-office trial -- particularly for repeat purchase items like consumer package goods or -- conversely -- high ticket and complex items like software or other systems innovations. We've produced some very elaborate demo diskettes and videos to convey the spirit of complex new systems.

It is also worth pondering the magnitude of demand overstatement. Overstatement is less of a concern if your objective is pricing rather than absolute forecasting -- but it can be a worry if the level of overstatement isn't comparable at all price points: Are people more likely to overstate demand at low prices than high ones? I'm convinced that this *is* a real problem, by the way, but I'm not sure how to resolve it. A worthy topic of research for the academicians in the audience, perhaps.

Another issue to deliberate is the impact of promotional spending levels on price sensitivity. We have developed demand models that incorporate promotion response in various industries, but we have been less attentive to the impact of promotion on price sensitivity per se. Notably by promotion, I am referring not only to discounts and coupons -- which, of course, effectively alter price. I am speaking as well of

advertising and its impact on price sensitivity. Final price decisions must take into account how aggressive a marketing campaign you are prepared to mount -- particularly for novel products whose benefits are not yet easily understood by consumers and whose price-value requires sustained promotional efforts to convey.

On balance, good pricing research sets realistic expectations and blends art with science. The results should never be regarded as the definitive basis for making a price decision but rather, as one ingredient -- one important ingredient, certainly -- in the intellectual mix. I counsel clients to recall that this is a social science, with all the poetry that implies, and not a science -- which means that sound pricing decisions must remain exquisitely sensitive to the industry and the market context. Data are never a substitute for judgment and neither should they be used as an excuse to dismiss intuition. It is not enough to discover from your research that you can charge \$25,000 a year for a therapy; you must also be prepared to consider whether there may be penalties to pay down the road once your customers have new options to entertain and can exact retribution for extortionate pricing in years past.

Pricing research is a compass, not an automatic navigational system. Expect it to provide worthwhile guidance but not irrefutable answers, and be prepared to select different tools from your pricing kit for different marketing problems. One size, one tool definitely does not fit all. Good luck in your pricing adventures.



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