The Right Mix for a Pricing Fix

Balancing relationship building and opportunism leads to a strategy for all seasons.

by Tim Laseter and Elliott Weiss

Illustration by Lars Leetaru

Consider the following situation, hypothetical yet all too familiar: A producer of plastic cup holders for automobiles has long-term contracts with several major car manufacturers. The cup company's capacity utilization is running at 75 percent, well below its 95 percent goal. Salvation appears in the form of a potential new customer — an automaker whose current supplier has been shut down by a strike. The purchasing agent wants a proposal for the production of cup holders for two or three months, the expected duration of the strike. How aggressively should the cup company bid for this short-term opportunity to consume its excess capacity? Should it set a price, as it usually does, based on full costs? Or should it set a lower, more competitive price based on variable costs?

It's the question that will not die: What is the best way to maximize profits over the long term? Executives of small and medium-sized companies deal with the conundrum every day — and too frequently, their decisions are ad hoc and only loosely considered. Yet there are ways to resolve the vexing problem of pricing without agonizing on a case-by-case basis. We favor a practical framework that considers two crucial factors: the "current relationship" with the customer, and the "capacity increment" required by the order. The current relationship could be anything from a single transaction to a critical, long-term partnership. The order's capacity increment could represent a large proportion of the company's total capacity, or a small one.

Without even constructing a 2x2 matrix, it's easy to see that this simple framework suggests four distinct pricing strategies:

• For large chunks of capacity in a long-term partnership relationship, a supplier should apply *open-book, full-cost pricing.*

• For small-capacity increments in transactional relationships, *yield management* offers greater profit.

• For a small-capacity increment in a long-term relationship (a relatively rare combination), a supplier should employ *marginal cost pricing.*

• Although it has become less common for a supplier to sell large increments of capacity in a trans-

actional relationship, traditional *opportunistic bidding* remains the preferred pricing model in such circumstances.

Short or Long

You'll notice that this framework deliberately avoids the more typical debate: Should pricing seek to recover and build profits on top of long-term fixed costs, as many business leaders believe, or should it seek marginal contributions above short-term variable costs, as many economists argue? It thus sidesteps the thorny question of which costs are truly fixed versus which are variable — and when the short term becomes long.

Real life rarely presents precise answers. For example, a company generally can break a fixed lease and pay a penalty. But this option can consume an uncertain amount of time, imposing equivalently uncertain costs, so the precise time over which lease costs are truly fixed remains elusive. "Free capacity" is a similarly unclear concept. Even when capacity utilization is below target, there remains some chance that new orders might arrive and consume the excess.

Inherent uncertainty makes it impossible to provide precise benchmarks for distinguishing short-term, variable costs from long-term, fixed costs. A pricing philosophy based on this distinction isn't terribly useful for real-life decision making.

A more productive framing of the pricing issue asks the following: Under what conditions should a supplier *ignore* fixed costs? Here, the answer involves a less subjective measure of time: the form of customer relationship. In transactional customer relationships — someone needs something from you now, and you may never see that customer again — pricing decisions can be made for each order individually, without concern about setting a precedent. In long-term relationships, however, the pricing of individual orders sets expectations for subsequent orders and must be reasonably predictable.

The second factor to consider is order size: Is it small or large relative to total capacity? A commitment of large chunks of capacity can significantly affect the financials of any business and must be handled strategically. Smaller increments of capacity pose fewer risks and strategic considerations.

The most commonly encountered combinations of the two factors suggest two utterly dissimilar pricing strategies. One extreme reflects the Japanese *keiretsu* system, with a small number of suppliers focusing on a small number of customers in long-term relationships. At the other extreme are companies that, thanks to the Internet, can handle transactions from thousands, even millions, of customers, yet still not use up a significant proportion of available capacity.

In the *keiretsu* model, *open-book, full-cost pricing* has become increasingly common. This approach encourages customers and suppliers to jointly examine the full costs of producing goods or services, and to price them at an appropriate margin. The margin should be large enough to encourage the supplier to reinvest in serving the customer for their long-term mutual benefit.

Honda of America excels in applying this model with its suppliers. Honda's buyers first analyze a supplier's cost structure in depth. Then, by tracking supplier capabilities around the globe, they bench-

Tim Laseter
(lasetert@darden.virginia.edu) is the author of *Balanced Sourcing: Cooperation and Competition in Supplier Relationships* (Jossey-Bass, 1998). He serves on the operations faculty of the Darden Graduate School of Business at the University of Virginia. Formerly a vice president with Booz Allen Hamilton, he has 20 years of experience in supply chain management and operations strategy.

Elliott Weiss
(weisse@darden.virginia.edu) is the Isadore Horween Research Professor of Business Administration at the Darden Graduate School of Business at the University of Virginia. Over his 25-year career, he has published and consulted extensively in the area of scheduling and capacity management.

mark these costs against best-in-class performance. If a supplier's productivity or quality standards fall short, Honda works closely with the company to develop plans for closing the performance gap. Ultimately, underperforming suppliers are dropped. Competitive suppliers, however, earn adequate margins that can be reinvested for continued growth with Honda.

At the opposite end of the spectrum is the mega-transactional company, trafficking in multiples of intense short-term deals. *Yield management* is an optimal pricing philosophy for small increments of capacity in transactional relationships. Here, prices do not depend on underlying costs. Instead, prices are dynamically adjusted, on the basis of forecasted demand, to maximize overall revenue for every increment of capacity.

When it was introduced 25 years ago by American Airlines, yield management aimed to sell the right seat to the right passenger at the right time. Proponents of yield management often limit its application to "perishable capacity," like airline seats and hotel vacancies. But it actually has wider applicability. Consider Amazon.com. At first blush, Amazon's inventory — books and other products — doesn't look perishable, and so wouldn't seem suitable for yield management, except under unusual circumstances (say, a period of high demand for a bestseller with variable availability). But Amazon's fulfillment center operation, which can receive upward of 1 million orders in a single day, prices "fulfillment capacity" variably, maximizing profits exactly as an airline does. It offers different delivery lead times at different price points: Customers willing to wait can receive free shipping; those wanting immediate gratification must pay a premium.

Amazon.com maximizes profits exactly as an airline does — through yield management.

Although yield management is more common in consumer-facing businesses than in industrial ones, untapped opportunities for applying its principles can be found in both. Simply look for chances to allocate capacity — or, alternatively, inventory — to different customer segments at different price levels. Think about businesses with variable lead times, to which customers would willingly pay a premium for faster service. Most repair businesses — from the local auto dealer to an aircraft engine overhaul operation — are first-come, first-served. This pushes out lead times when demand exceeds capacity. By applying yield management techniques, a business can offer fast-turnaround service at a premium price — if it can accurately predict demand and dynamically allocate capacity.

Two Alternatives

Although open-book pricing and yield management apply to the most common combinations of customer relationship and capacity increment, our framework suggests two other pricing approaches, which might be viewed as variants of the open book and yield management methods.

The first alternative strategy, *marginal cost pricing,* offers a logical extension of open-book, full-cost pricing. It should be applied only in a long-term relationship for a small increment of capacity — and then only with absolutely clear communication of the rationale to the customer.

The open-book model ensures that the supplier's base business has been priced for reasonable profits that can sustain the company. If a long-term customer seeks a low level of incremental work, the supplier can use marginal pricing and need not include fixed costs. Since the base business was priced at full cost, with an agreed-upon level of base volume, the long-term customer has already covered the supplier's fixed costs. So a small amount of unplanned, incremental work can be rationally priced on a marginal basis. The unplanned business offers some incremental margin, but not an undue windfall to the supplier.

The second alternative method, *opportunistic bidding,* applies in short-term, transactional relationships where larger capacity increments are at stake. In such cases, yield management's dynamic pricing algorithms do not apply. Consider a construction business for which a single pricing decision can have substantial impact on the supplier. Although such bids require a thorough understanding of cost, competitive dynamics tend to have a huge effect as well. In times of limited demand, construction companies lower margins in hopes of winning one of the few jobs available. But, when demand rises and

capacity becomes tight, construction companies bid with higher margins. They know that other options probably exist if they overprice and lose the current one.

Such pricing clearly parallels the profit-maximizing logic of yield management. But, unlike yield management, opportunistic bidding does not demand sophisticated optimization models. Rather than setting a range of price points and dynamically adjusting them over time as uncertainty subsides, the company makes a one-shot pricing decision with a simple win/lose outcome. Pricing must be based on careful consideration, and a company should be wary of pricing so low that fixed costs are not covered — unless the likelihood of consuming the capacity more profitably is *extremely* low. Otherwise such bids could lead to the "winner's curse": the fate of a supplier skilled in landing undesirable, unprofitable jobs.

Done right, opportunistic bidding has a real upside. Because the relationship is transactional rather than long-term, the supplier can extract premiums in times of high demand without fear of reprisal when demand subsides.

Mix and Match

Ultimately, most companies apply a mix of pricing approaches. For example, though airlines employ yield management techniques, they will contract for fixed fares between cities for a customer willing to commit to significant volumes. Similarly, a plastic parts supplier, like our cup-holder manufacturer, may employ open-book, full-cost pricing with a couple of long-term automotive customers that consume most of its capacity. But the same company may still use opportunistic bidding when serving small industrial companies that occasionally need plastic components.

The key is to anchor the business in an appropriate *primary* pricing methodology and build the capabilities necessary to implement it. If you have long-term relationships with a small number of customers, open-book, full-cost pricing probably applies best. This strategy, coupled with the ability to benchmark competitors and apply continuous improvement, helps minimize the likelihood of a re-sourcing decision by a major customer. The occasional application of marginal pricing for small, short-term needs demonstrates commitment to the relationship, which strengthens the sense of partnership, encouraging customer investment in joint improvement efforts. Taking advantage of long-term customers by adding pricing premiums in times of tight capacity — as in the yield management model — obviously contravenes the nature of an open-book partnership. Although occasional, judicious use of opportunistic pricing may be warranted, excessive use will surely strain close, long-term customer relationships.

If demand comes in small increments from a large, evolving base of customers, investing in yield management systems will likely increase revenue from existing capacity. A pure cost-based approach will leave money on the table in times of limited industry capacity, and contribute to lost revenue and unused capacity during industry downturns. Although the sophisticated analytics required by yield management may be intimidating to users (and costly for businesses to implement), returns can be substantial. Moreover, the logic behind these tools, and the processes adopted to use them, can be leveraged to gain larger jobs and longer-term customers.

Neither yield management nor open-book pricing is inherently superior. Both models give customers confidence in their buying decisions. Yield management makes pricing options transparent and allows customers to choose when to pay a premium and when to seek a discount. Open-book pricing shows underlying costs and ensures that the supplier is not seeking exorbitant margins. Imprudent mixing of strategies, however, sends confusing signals to customers, who then wonder if a better deal is possible through an alternative pricing approach.

Best yet, either end of the spectrum can be available, depending on the business strategy selected. Our cup-holder manufacturer can choose to focus on a small number of customers and work jointly to reduce costs through open-book pricing. But it could also choose to use its plastic injection molding machines to produce a wide variety of products other than cup holders for the many industrial customers seeking plastic parts. With no single order or customer representing a significant share, the supplier could employ advanced yield management techniques to dynamically adjust prices to customer demand patterns. To truly maximize profits, the choice must be made strategically, and not haphazardly. ✚

Reprint No. 05202