

How Low Can You Go?

Welcome to the new Price Is Right, the high-stakes game show where you get to guess the right price to win a multimillion-dollar manufacturing contract. Our first contestant, Jim, is a sales manager at a sheet metal maker. This is Jim's first time bidding for business in an online auction, he's a little nervous.

After all, we're playing with his company's bottom line here today. Maybe you're worried about your own bottom being on the line. The truth is, Jim has every right to be afraid—and if your company is about to play games with its prices on the Web, you're probably feeling a bit uneasy now too.

The ability to change prices on the fly—also called dynamic pricing—carries a certain amount of risk. Just look at Jim. Like many suppliers, he's about to slug it out in a descending price, or reverse, auction—that is, an auction in which the prices drop as the bidding progresses. If Jim bids too cautiously on the job, he may lose it to someone else. But if he bids too aggressively, he may be overcome with the winner's curse: "I won the order, now how am I going to make any money on it?" Good old-fashioned fixed pricing isn't dead yet—and some pundits say it never will be. But dynamic pricing is going to become more prevalent in business-to-business e-commerce. **Forrester Research says that by 2004, half of all trade in B2B marketplaces "will take place through dynamic pricing venues, forcing suppliers to set prices in real-time."** So smart sellers need to think about how to handle tricky price negotiations online—before they get embroiled in the bidding wars.

Risky Business: The Perils Of Dynamic Pricing

Suppliers that want to dabble in dynamic pricing online typically test the waters by selling surplus or discontinued merchandise in an English-style auction—where buyers bid up the prices as the auction progresses. The thinking is that by putting surplus stock up for bid, a company can garner higher prices than it might otherwise receive, as long as there are enough bidders.

In the short term, auctioning off surplus goods can help a company cover its fixed costs. But it may damage the company's profitability in the long term, says George Cressman, senior pricer at Strategic Pricing Group. Customers may learn "to expect that prices will be lower if they postpone purchases," Cressman warns. As a result, they may wait to buy, banking on suppliers to get desperate to unload inventory or meet their quarterly numbers. Competitors, meanwhile, may view the auctions as a drive for market share—not a one-time inventory clearance—leading to a price war and permanently lowered prices.

Reverse auctions can be an even scarier proposition for sellers. They, too, can make buyers more price sensitive, Cressman says. And they can inspire sellers to get caught in an underbidding frenzy, going lower and lower to grab the piece of business that's on the table. He urges sellers to resist the temptation to do so. The buyer in a reverse auction is not necessarily obligated to pick the lowest bidder, and price may be used only to winnow down the number of suppliers with whom a buyer will negotiate.

Pricing It Right: A Lesson From The Airlines

Despite the potential drawbacks of reverse auctions, some sellers may have no choice but to participate in them if their customers want them to do so. Clearly, **the**

most important thing to know before you join the fray is how low you can go—what is your walk-away price? Suppliers need to have a good handle on their costs. Yet they also need to understand how their prices drive demand and influence competitors.

A sophisticated pricing strategy pioneered by the airlines and powered by high-end software may be able to help them do just that. Revenue management is a scientific way of calculating prices to maximize profits, based on models of customer demand, price sensitivity, margins and other sales factors. Why has revenue management taken hold in the airline industry? Because airlines have a limited and perishable inventory—there's a fixed number of seats on a 747, and once the plane takes off, any unsold seats are worthless. "The only lever the airlines have to pull to adjust supply and demand is the price lever," says Robert Phillips, CTO at Manugistics, formerly known as Talus Solutions, a revenue management software vendor.

Software from vendors such as Manugistics and Pros Revenue Management helps the airlines figure out the right price to charge for every ticket—and whether and where it makes sense to sell a ticket—so that they can balance supply and demand. The software crunches historical data on demand and price sensitivity. It looks at opportunity costs and channel issues. It predicts future demand and then generates price and availability recommendations for every seat—say, how many seats should be sold at full fare with no restrictions, how many should be sold as nonrefundable tickets with a 14-day advance purchase—and it revises those recommendations based on actual sales.

The airlines now let software make automatic pricing decisions for well over 90 percent of the tickets they sell, says Andrew Boyd, vice president of research and design and senior research scientist at Pros. Revenue management has spread from the airlines to other industries that share similar economic characteristics. Implementations can run into several million dollars. But depending on the industry and the company, **deploying revenue management software can result in 2 percent to 10 percent increases in revenues**, Boyd says.

Broadening Revenue Management: Theory And Practice

David Simchi-Levi, a professor of engineering systems at MIT, believes that manufacturers can use revenue management techniques to help set prices dynamically. Based on his research, manufacturers that adopt dynamic pricing can increase the efficiency of their supply chains by better matching supply to demand and can in turn increase profits anywhere from 5 percent to 7 percent.

How might manufacturers achieve those gains? They could adjust prices so that the plant always runs at full capacity, charging lower prices at times of low demand, higher prices at times of high demand, he says. Or they could extract higher prices from customers who need a product more quickly. Companies that adopt dynamic pricing will tend to have lower prices, on average, than companies that don't—a crucial advantage on the Internet, where it is easy to compare prices among competing suppliers.

Forrester research analyst Navi Radjou notes that revenue optimization software vendors are beginning to pitch their products to manufacturers that want to participate in online B2B marketplaces and that need help setting prices in real-time. For example, Maxager Technology sells software that aims to help manufacturers use their plant capacity more efficiently by measuring profit per minute—not per unit. "What manufacturers really need to know is, 'Which product is generating the most

cash and profit per minute of my precious manufacturing time through my factory," says Maxager Technology CEO Michael Rothschild. One of Maxager's software modules helps companies do "precision bidding"—that is, calculate the walk-away price to bid on a specific volume of a specific part number to a specific customer, based on raw materials prices, size of the order, profitability of the product per minute and the company's target return on assets, among other factors. Some of the company's customers plan to use the software to help them prepare bids in B2B marketplaces.

Forrester's Radjou believes that manufacturers in complex industries—say, automotive or high-tech—should probably wait to deploy revenue management tools until they have developed tight, real-time information-sharing with their suppliers. But in commodity industries—say, paper, plastics or chemicals—raw materials are more abundant; manufacturers don't need real-time links to their suppliers in order to make on-the-spot decisions about pricing or production levels. "So they can start rolling out revenue optimization tools without delay," Radjou says, although customization would take some time.

Dynamic Pricing: Not A Panacea

As promising as the revenue management approach sounds, B2B sellers may not want to entirely emulate the airlines, cautions Eric Mitchell, president of the Professional Pricing Society. Many consumers resent airline pricing because fares change so frequently and they don't know what a fair price is for a given trip. **B2B customers could react similarly if faced with shifting prices for a drum of industrial lubricant or a gross of hex-head bolts, Mitchell says. "You can just drown in prices for a product." Sellers also need to think about whether they've got the right people on staff to manage dynamic pricing, Mitchell says; once more of an administrative function, pricing will increasingly need to be overseen by employees with a strong quantitative background.**

Cressman, meanwhile, has a more fundamental concern: Managers will rush to roll out dynamic pricing strategies and software before they've thought through the strategic implications of such a policy. "Implemented poorly, dynamic pricing schemes are likely to drive more customer price sensitivity and the demand for more price negotiation to reach lower prices," Cressman says. "And poorly implemented dynamic schemes create the potential for competitive price wars and lowered profitability for all."

Pricing strategies should be founded on an understanding of the value you provide your customers, Cressman says—that is, understanding your economic impact on their businesses. Does your product or service help reduce their overall costs? Does it increase their revenues? Sellers also need to be constantly marketing themselves to target customers, communicating their value, Cressman says: "Here's why you do business with me," "Here's my impact," "Here's what you'll lose if you stop doing business with me." That's the only way sellers can get paid what they are worth—offline or online.