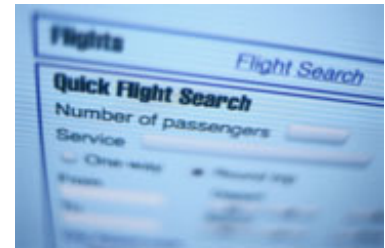




What Consumers -- and Retailers -- Should Know about Dynamic Pricing

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A study released in June by the Annenberg Public Policy Center of the University of Pennsylvania was provocatively titled, "Open to Exploitation: American Shoppers Online and Offline." It concluded that American consumers are "vulnerable to subtle forms of exploitation" by marketers.



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Much of the study, which was based on a telephone survey of 1,500 adults, focused on privacy issues dealing with the collection of information about consumers. But it also examined people's knowledge of pricing. It found, for example, that 64% of respondents who had recently used the Internet did not know that it is legal "for an online store to charge different people different prices at the same time of day." In addition, 71% did not know that it is legal for bricks-and-mortar stores to do the same thing.

Is this type of pricing, known as dynamic pricing, underhanded or unethical? No, according to faculty members in Wharton's marketing department. They say such pricing -- also called targeted pricing, flexible pricing, tailored pricing or, to use the phrase employed in the Annenberg study, discriminatory pricing -- is customary, an essential tool for companies, and often beneficial to individual customers and society as a whole. Does dynamic pricing sometimes upset consumers? Research shows that people do get disturbed if they learn that they paid more than someone else for the same item. But that happens because they often do not know much about the factors that go into a company's decision to set prices, are reluctant to ask for a lower price, or find bargaining distasteful. And, of course, the people who get bargains are not at all likely to be disappointed or feel exploited.

"Dynamic pricing has always been with us," says Wharton marketing professor [Peter Fader](#). "Think of the classic hagglers in the market of a Middle East bazaar. People will pay very different prices for the same bolt of fabric. This is more the norm in transactions than fixed pricing. Fixed pricing is a much later phenomenon and it's an artificial one. Companies must engage in flexible pricing practices in order to honor their responsibilities to their shareholders. If retailers charge a flat, low price to make everyone happy, they're leaving a lot of money on the table."

"There is nothing really new here," agrees Wharton marketing professor [Z. John Zhang](#). "The only thing new is that the Internet has given companies so many different ways to set prices and adjust prices." Notes [Stephen J. Hoch](#), chairman of Wharton's marketing department: "People are exposed to dynamic pricing all the time. Do they understand [everything about it]? No. But they understand senior citizen discounts and student discounts."

To be sure, not all pricing strategies are permissible. Collusion by competitors in an industry to fix prices violates the law, as does the use of race or gender to target customers for different prices or other discriminatory treatment. In addition, if retailers use dynamic pricing in such a way that it angers customers, they can erode customer loyalty, spark a backlash and lose business. But dynamic pricing is common. Different customers in an automobile showroom at the same moment can end up purchasing the same vehicle with the same extras for wildly divergent prices, depending on their knowledge of the car business and their negotiating skills. People with poor credit histories may pay higher interest rates to the same credit card company than people with stellar credit scores. If you are a highly profitable customer, a

telephone company may offer you \$50 to switch to their services, but it may offer only \$20 to your less profitable neighbor for switching. And who has not sat on an airplane wondering whether the passenger in the next seat paid a lot less for her ticket, even though she bought it on the same day?

Or consider the vacationer who, on a hot day at the beach, decides that he wants a cold beer. He can walk one block north to the luxury hotel along the boardwalk and pay \$5 for a bottle. Or he can head one block south to a corner bar and pay \$2. "It's the same beer, but people wouldn't be at all offended to pay \$5 at one place and \$2 at the other," Fader says. "People understand this. These are business issues more than legal or ethical ones."

The Internet has given online retailers tremendous opportunities to collect data on customer behavior and target people for different prices for the same merchandise. Website operators not only know what items customers put into their shopping baskets, but what items they remove before checking out. Retailers can monitor behavior for long periods of time and figure out what web pages customers visit, which items they look at, and which products make particular customers happy. Online merchants also can tell if someone is a serious or casual shopper. Non-purchase visits to a site may tell the retailer as much about customers as those visits when they fill up their shopping carts.

But precisely how retailers should tailor their prices based on customer behavior is not always readily apparent or predictable. For example, should frequent customers always be offered better prices or more frequent discounts than those customers who are not as loyal?

"There's not an obvious answer," Fader explains. "You can make two good arguments. If you're a frequent customer, maybe retailers should charge you more because they have you locked in and can rely on you for your business. Or maybe they reward your loyalty and charge you less. If a retailer makes the wrong decision, they can lose a good customer and leave money on the table. Retailers have to look at not just how often any given customer has been to the website, but when they visited, what they bought, and whether their transactions were high-margin. There are no simple rules of thumb. Retailers might be better off picking a few customers and giving them a 'special price' today. Companies tend to be uncreative in the way they approach these questions. They look for black-and-white answers rather than nibbling at the edges."

Indeed, says Fader, there will be times when companies "make bad decisions and charge too much, tick people off and lose them as customers." But that, he says, is the beauty of a free market. "If a company does dynamic pricing badly, they're going to lose customers and get beaten to a pulp."

Forget Big Brother

It also is important for consumers not to conjure up images of Big Brother-style retailers doing all in their power to take advantage of them, according to Hoch. Even though retailers have the ability to collect tons of information, many do not bother to gather it at all and others are inept at using it effectively. "There's a lot of data you can collect about online clicking behavior," he explains. "Most online merchants don't collect that information and don't analyze it. The assumption is that these companies actually are very effective at all of these different practices. They're not."

There are occasions, too, when flexible pricing does not work in the best interests of the firm. "If you are the only firm in the marketplace and have a near-monopoly, or if your competitors are slow in reacting to what you do, you have pricing power," notes Zhang. "You know some customers are willing to pay more for your product and some will pay less. So it's good for you to charge different prices to different people based on their willingness to pay. This has been shown in many studies."

If, on the other hand, a marketplace is crowded with many competitors, dynamic pricing may be a mistake because it can lead to a price war and erode profit margins, Zhang says. "If everybody has pricing

flexibility and uses that flexibility, they're all going to bid for every customer in the marketplace and competition is going to intensify. This is not necessarily good for the firm." In such an environment, the company that stands the best chance of emerging the victor will be one with "a large loyal following, good quality products and a good brand image."

There are occasions when flexible pricing can benefit society, Zhang adds. Pharmaceutical companies can sell drugs at lower prices to poorer people who need them because they charge higher prices to those with the means to pay more. If a drug company can set only one price for every customer in the market, that price will be low relative to those who are price-insensitive and can afford to pay more and too high for those who cannot afford to pay much at all. But if a drug company engages in discounting, it can charge less to those who cannot afford to pay much. As a result, the company can expand its market and society can benefit in a number of ways. More people are going to use the drugs and the profitability of the firm is going to increase, allowing the company to conduct more research and development and turn out more drugs. "That's why no economist will ever say that we should ban price discrimination," Zhang states.

Transparent Price Discrimination

Marketing professor [Lisa Bolton](#) has conducted research examining perceptions of price fairness and found that people use three "reference points" to determine what price they feel is fair for any given product: what the product cost in the past, what competitors charge for the product, and the costs associated with a product.

Bolton found that most people simply misunderstand the many factors that companies consider in setting prices. Consumers underestimate, for instance, the impact that inflation has on companies' costs. When they compare prices across competitors, consumers often feel that all merchants should simply charge the same price for the same item, not taking into account the possibility that the department store across the street may charge higher prices because its costs of doing business are higher. Moreover, consumers too often focus on the cost of the physical materials required to make a product and neglect other manufacturing costs.

According to Bolton: "People will say, 'It's just a cotton T-shirt, how can you charge that much?' Or they say of a drug, 'It's just little pill, why does it cost so much?'"

By and large, consumers also feel that promotional costs for products and services are unfair and that the salaries of senior executives are unfair too. "The bottom line," says Bolton, "is there is a general perception that prices are unfair. Researchers don't understand well enough how consumers perceive the marketplace, what we call 'marketplace metacognition.' People live in a capitalistic society and believe in the free-market system, and yet they don't seem to be knowledgeable about it."

Marketing professor [Jagmohan S. Raju](#) says companies can engage in flexible pricing in a way that minimizes customers' potential antagonism: They can be more open about what they are doing. "Companies are recognizing it's important to be fair, and customers are becoming more knowledgeable about what is going on with pricing. They want things to be more transparent. Transparency does not mean not charging different prices; it means companies being open about their strategies. Companies want to make sure their existing customers are happy, and their prices have to be in line with that goal. There is a recognition that customers are more knowledgeable about prices and can talk to each other about prices.... This does not mean that companies cannot charge different prices, however. I think they can still do that."

Most observers agree that consumers will have to become accustomed to flexible pricing because it is here to stay. Fader says the companies, offline and online, that will benefit most from dynamic pricing will be those that conduct frequent experiments with pricing strategies -- continually charging higher and lower prices to different people, offering coupons, discounts and other incentives -- to see which work

best at improving the consumer's shopping experience and increasing revenue and profit.

"A lot of learning comes by experimenting," Fader notes. "Companies that know what experiments to run and read and act on the results are going to get richly rewarded. I'm looking for the time when we have electronic price tags on shelves in stores instead of bits of paper so that retailers can change prices during the course of the day or even as customer X is walking down the aisle. Companies will try it, and some will do it stupidly. But some will do it well and find ways to keep customers locked in and keep revenue flowing in."

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