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Neil Howe

Demography

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A Special Price Just for You

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TREND WATCH: What's Happening? *New federal legislation rolling back privacy regulations is the latest boon for "personalized pricing," which allows retailers to scoop out consumer surplus by offering a different price to each shopper. Long used in e-commerce, personalized pricing is making headway in brick-and-mortar retail.*

Our Take: *Personalized pricing—a.k.a, price discrimination—enables producers with pricing power to transfer more income from consumers to themselves. A populist backlash may be in store, however. Most Americans are unaware of personalized pricing, and strongly oppose it when they learn about it. Boomers object to privacy-invading schemes, while Millennials don't believe that some consumers should be offered a better price than others. Time will tell whether public pressure will push regulators to come down on brands and retailers that customize, person by person, what they charge.*

Earlier this month, President Trump signed legislation killing Internet privacy rules that would have forced ISPs to gain affirmative consent before sharing consumer data. The move puts more personal information than ever in the hands of businesses—enabling retailers not just to differentially market their goods and services but to differentially *price* them as well.

Enter "personalized pricing," a business method used by information-rich retailers to maximize revenue. Personalized pricing is today being practiced on an unprecedented scale—thanks to the proliferation of personal data, the refinement of Big Data algorithms, and the widespread decline in the competitiveness of retail markets.

How exactly does personalized pricing work? Retailers use shopper information such as age, location of residence, and Web-browsing history to build an all-encompassing profile of each individual consumer. Using that profile, retailers then adjust prices based on the consumer's willingness to buy—raising prices for the likeliest buyers and lowering prices for the unlikeliest buyers. (In microeconomic parlance, this practice is known as "scooping out the demand curve.")

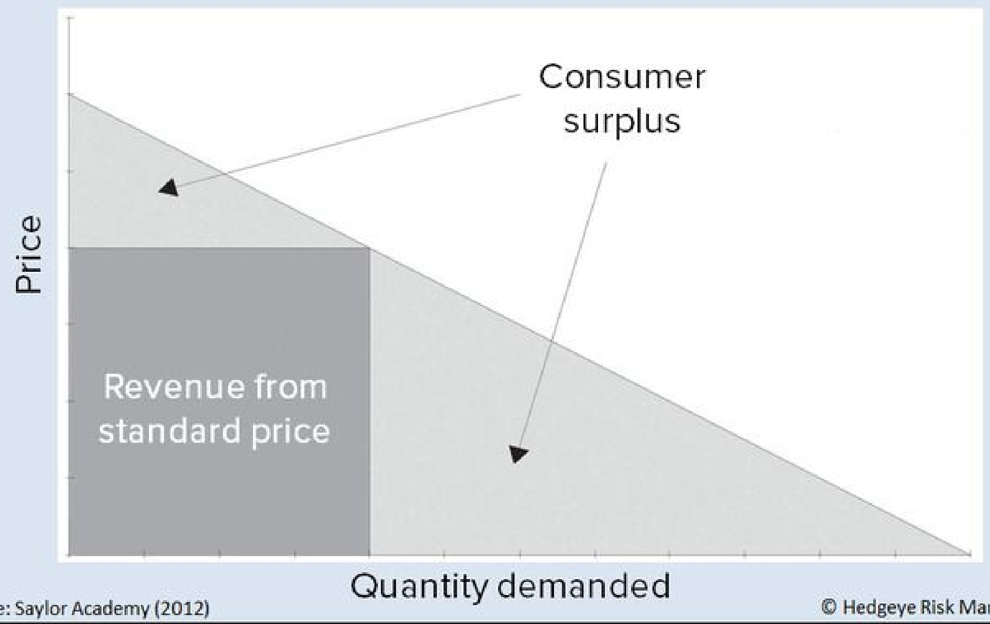
THE THREE TIERS OF PRICE DISCRIMINATION

Personalized pricing is a powerful example of what economists call "price discrimination," by which retailers segment their market and charge a different price to each segment.

Think first of the demand curve associated with a standard price. A retailer that charges just a single price misses out on the potential revenue from buyers who would have paid more for that item—as well as from buyers who would have bought (but did not buy) the item at a lower price.

STANDARD PRICING: MISSING REV. AT BOTH ENDS

STANDARD PRICING



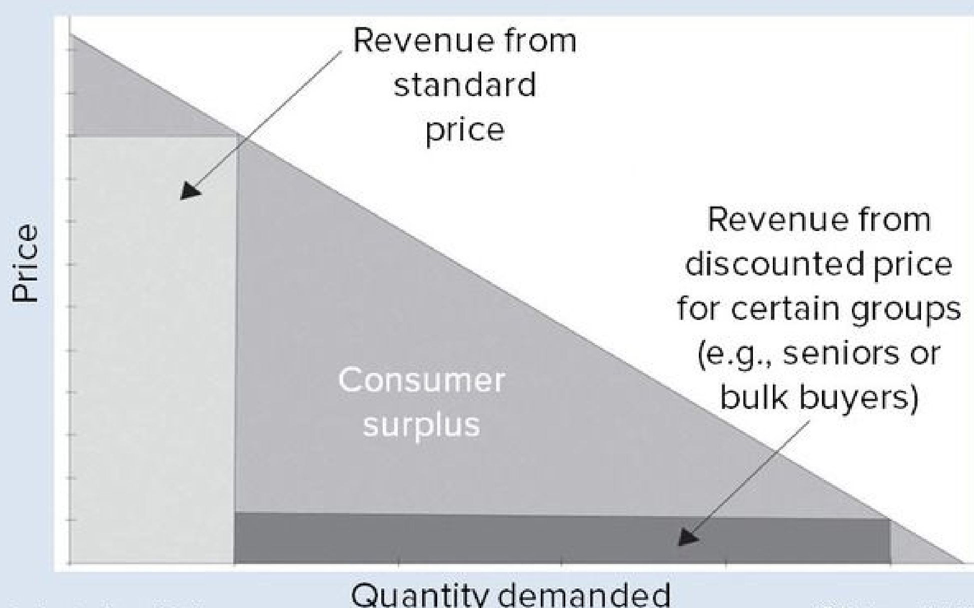
Source: Saylor Academy (2012)

Setting **one price for all consumers** means that retailers miss out on revenue from buyers who would've paid more—as well as consumers who would've bought at a discount.

The mildest form of price discrimination in terms of the amount of captured consumer surplus is "third-degree price discrimination." This method involves offering the same product at a discount to certain consumer groups. Some popular examples include senior discounts or student discounts. Compared to standard pricing, this scheme captures more revenue at the low end of the price spectrum—but still leaves plenty of consumer surplus.

3RD DEGREE: MISSING REV. IN THE MIDDLE

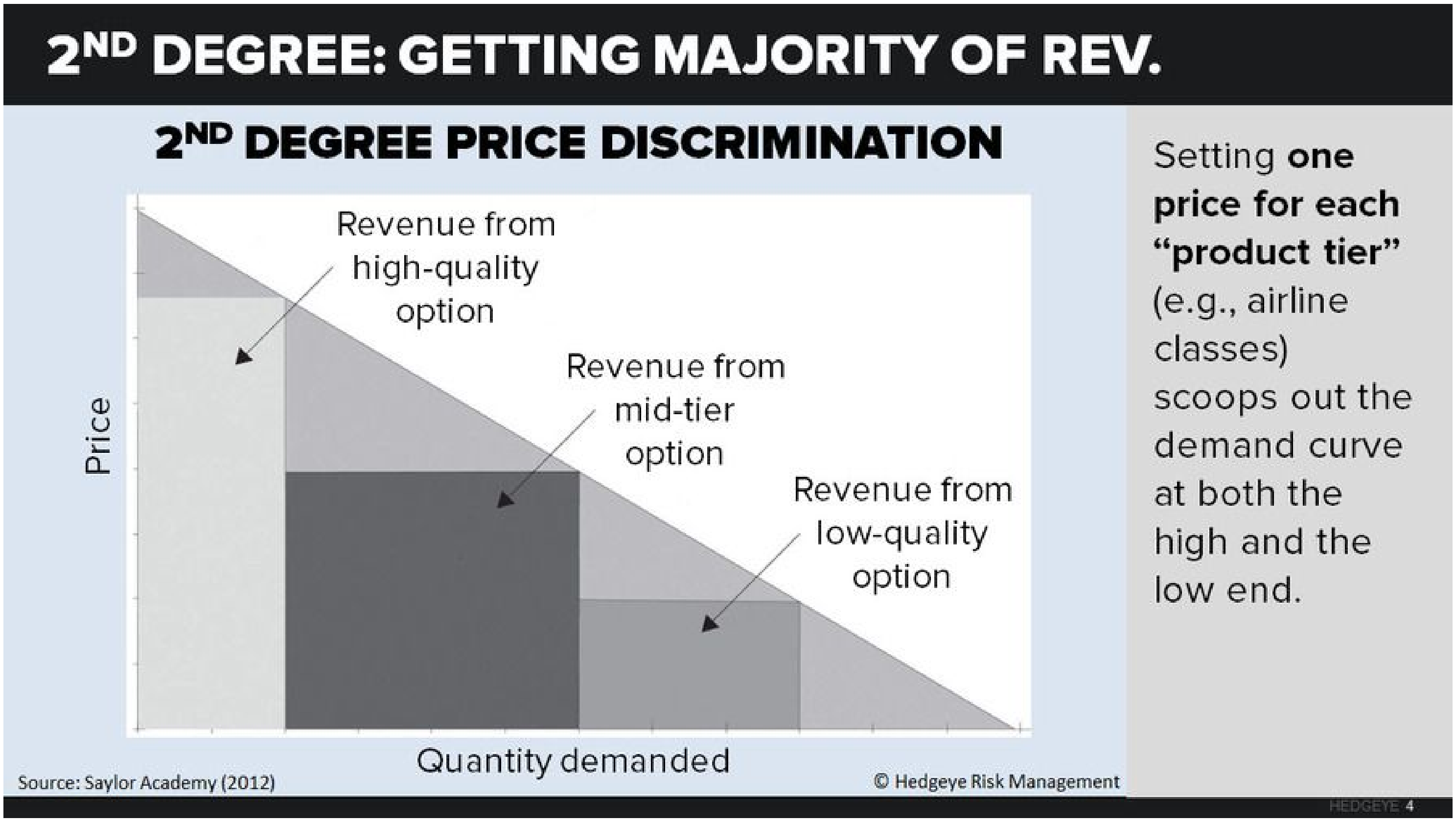
3RD DEGREE PRICE DISCRIMINATION



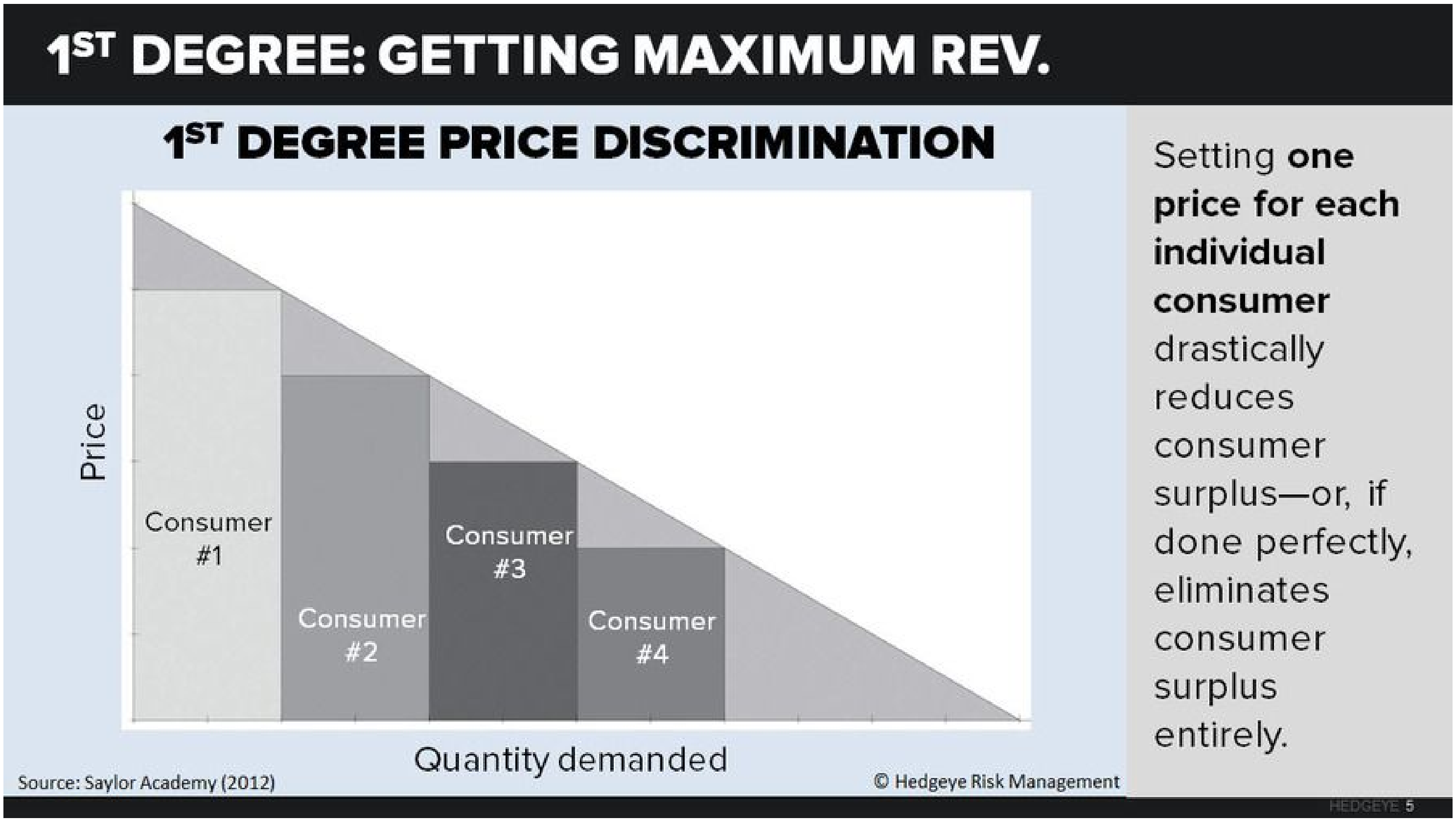
Source: Saylor Academy (2012)

Setting **one price for each "consumer class"** (e.g., elderly and nonelderly) draws in low-income buyers who wouldn't have bought at the standard price.

Next comes "second-degree price discrimination." This method involves offering tiered prices based on product quality or quantity. Airline tickets are probably the best-known example of second-degree price discrimination: Think of a first-class ticket that is thousands of dollars more expensive than economy class, with marginal improvements (more leg room, better food) that don't justify the added cost. Also falling into this category are bulk discounts by which buyers get a lower price if they buy a certain amount of product.



Finally comes personalized pricing, also called "first-degree price discrimination" or "perfect price discrimination" because it enables retailers to use personal data to charge the equilibrium price to each consumer. Ideally this pricing method would eliminate *all* consumer surplus (hence the "perfect" moniker), but perfection is tough for retailers to achieve. The ones with the most data can get close.



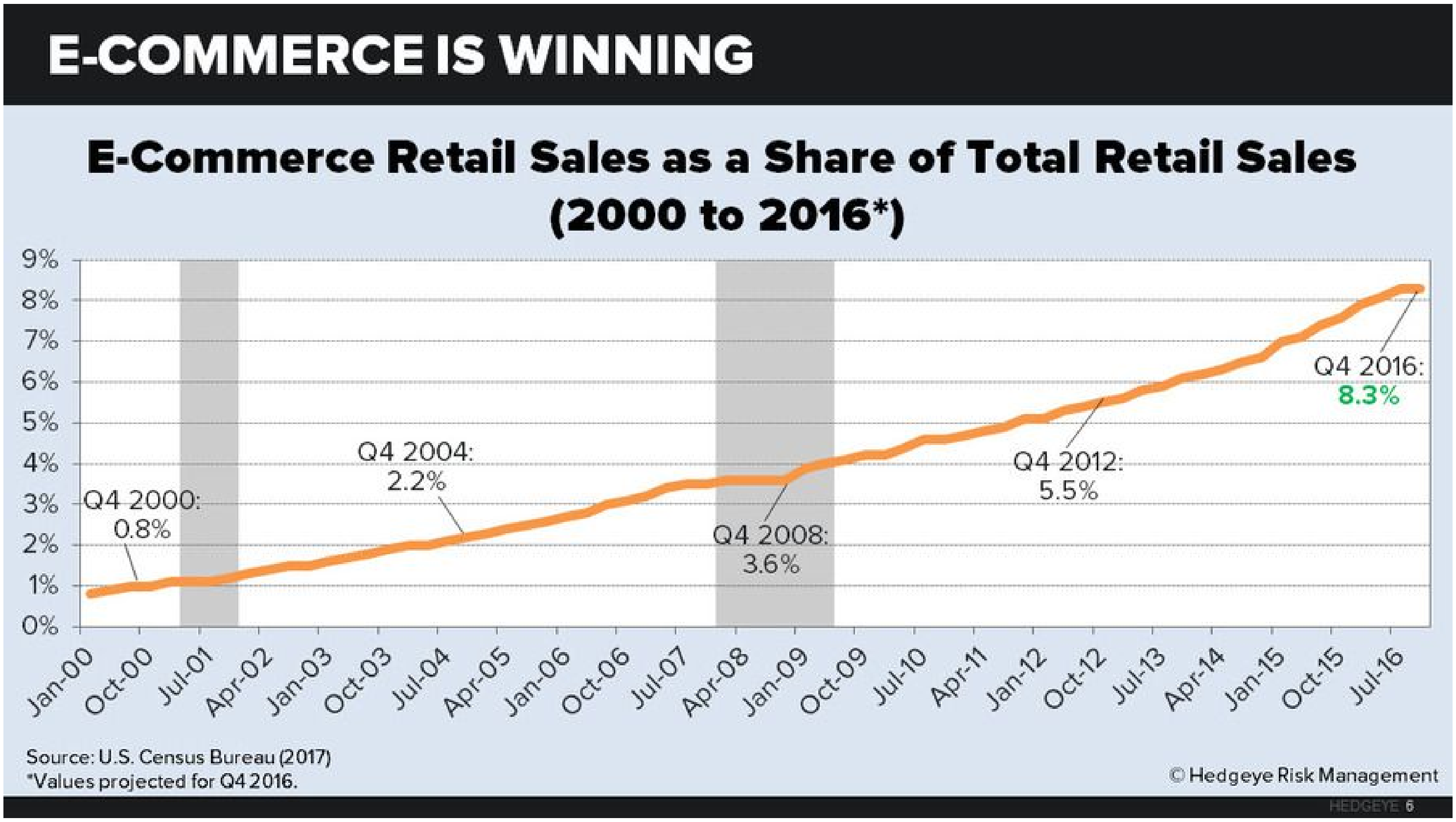
The potential revenue gains brought on by personalized pricing are impressive. Economics professor Benjamin Shiller estimates that a pricing model based on Web-browsing variables could increase Netflix's profit by 12%. Consider also the added revenue from a personalized coupon campaign that increases redemption rates from 1% to as much as 25%.

WHO IS USING PERSONALIZED PRICING?

For years, companies like Amazon were the only ones that could possibly practice personalized pricing—since they have always had easy access to the abundant personal data that make it possible.

The instant you enter an e-tailer's domain, the company can see everything from your browsing history to your Web-surfing device to your zip code—in other words, a gold mine of information for retailers. New "fingerprinting" technology even allows vendors to track users across multiple browsers.

Amazon is set up to update its prices for each customer *as many as 2.5 million times per day*, compared to just 50,000 times per month for in-person retailers, according to marketing professional David Hilton. It's not just ease of use, economies of scale, and negligible floor space that endows e-commerce retailers with a big profit advantage. Price discrimination is also part of the story explaining why their sales have doubled as a share of total retail sales since the end of the Great Recession.



Personalized pricing has been embraced by online travel and hospitality firms. Orbitz has been showing higher hotel prices to Mac users since at least 2012. Same-day booking app HotelTonight recently introduced two features that show discounted rates to users based on their location. (Hint: If you want a good price on most flights or hotels, sign in from an ISP in Buffalo.)

But brick-and-mortar retailers have been catching up. In-store analytics enables these firms to learn about consumers as they navigate the store. (See more on this subject here: "**Tracking Shoppers, Boosting Sales**.") Omnichannel shopping allows retailers to merge online and offline purchase behavior by pulling data from shoppers' smartphones. These retailers are given a further assist by data pulled from the 3.3 billion loyalty program memberships in the United States (roughly 29 per household).

Grocers and big-box retailers were the first to bring personalized pricing to physical stores. Perhaps the most publicized brick-and-mortar foray into personalized pricing is Safeway's "Just for U" program, which offers shoppers customized deals based on their shopping history. Whole Foods now sends shoppers customized coupon offers through its app. Joining these firms is Kohl's: As part of its "Greatness Agenda" rebrand, Kohl's introduced a new "store mode" for its mobile app featuring personalized prices for each item.

For now, yes, the advantage lies with e-commerce because of the sheer amount of data that firms like Amazon have on their shoppers. But as personalized pricing advances, a rising share of physical retailers will get their hands on all of this personal e-data—and add that to the in-person analytics they already possess. In time, the in-store experience could become far more personal, useful, and immersive than the e-tailer experience is today.

WHAT MAKES THESE PROGRAMS WORK?

Big Data and sophisticated digital IT is just one prerequisite for the spread of personalized pricing. Another is the general decline in marketplace competitiveness and transparency—and the waning of antitrust enforcement efforts.

Personalized pricing cannot work without some degree of monopoly power along with widespread consumer ignorance of the practice. Otherwise, savvy consumers would buy products from a cheaper source and "arbitrage out" the difference by reselling at a markup.

For a real-world example of how transparency works in retailers' favor, just look at "price-match guarantees." Retailers assume that while price-sensitive customers will take the time to find the best deal, they can profit off of high earners for whom the opportunity cost of clipping coupons is too great. Ohio State University researcher Matthew Corcoran found in 2012 that low-price guarantees can actually result in higher prices, since retailers figure that higher sticker prices more than make up for the (rare) price-match payout.

As for monopoly power? It is certainly abundant in today's economy. The evidence is all around us: Look no further than the swelling market shares of leading companies in nearly every industry (see: "**Shhh! The Markets Are Concentrating**"), or the steadily sliding rate of new business formation (see: "**Where Have All the New Businesses Gone?**").

As a half-step toward personalized pricing—changing prices not for each person but for the hour or day in which the person visits the store—retailers dream about effortless ways to change all their public shelf prices and quickly as they can change the personal mobile-app prices of their products. Many are thus rushing to implement so-called "dynamic pricing" systems in their stores. These systems rely on electronic shelf labels (ESLs) that display digital prices and product information at the point of purchase. Mostly used in Europe, ESLs are now being tested by U.S. retailers such as Kroger's. In fact, forecaster MarketsandMarkets expects North America to be the ESL market leader by 2020.

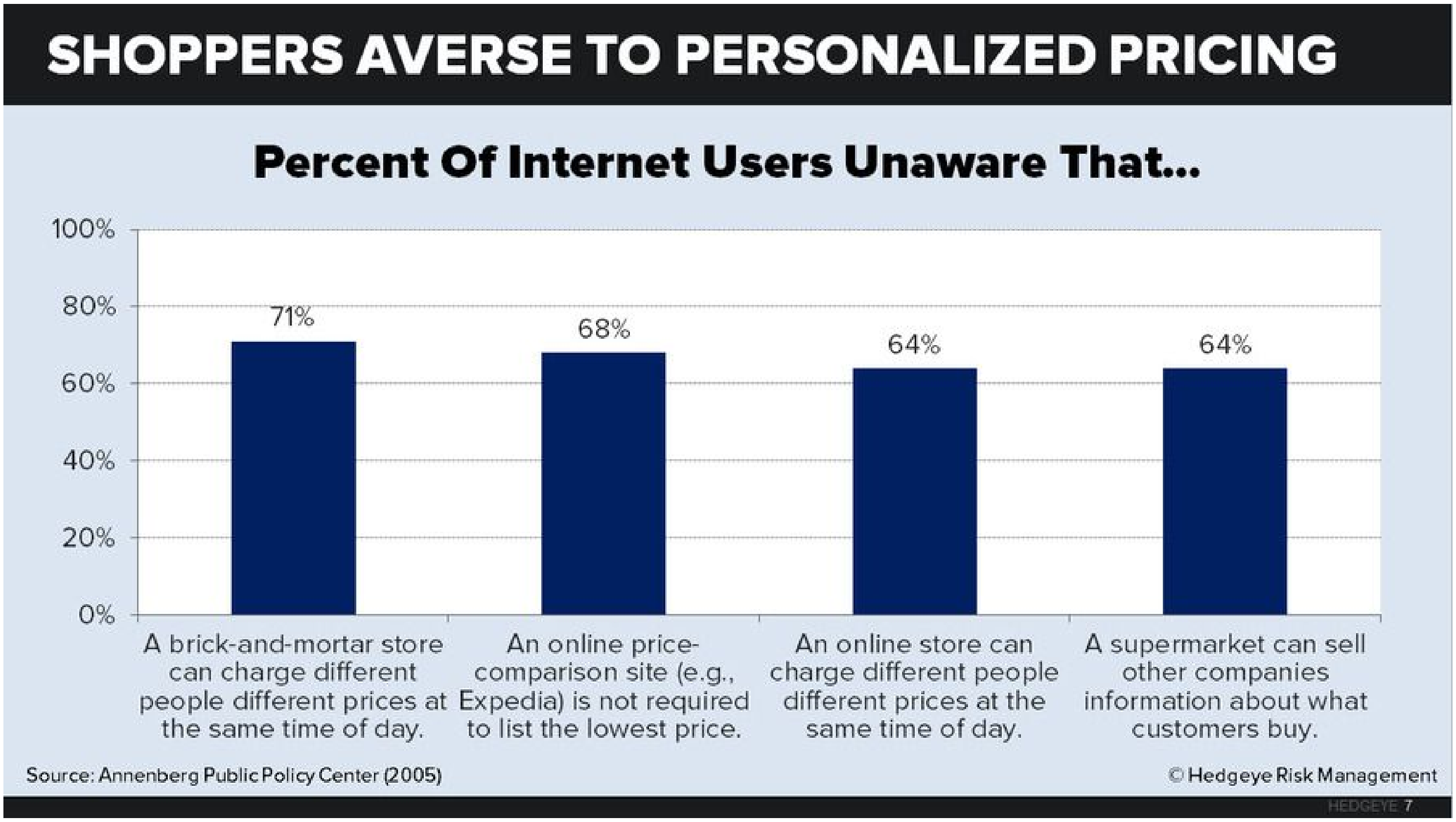
REMAINING OBSTACLES

But personalized pricing may soon run into a populist headwind that limits its growth potential.

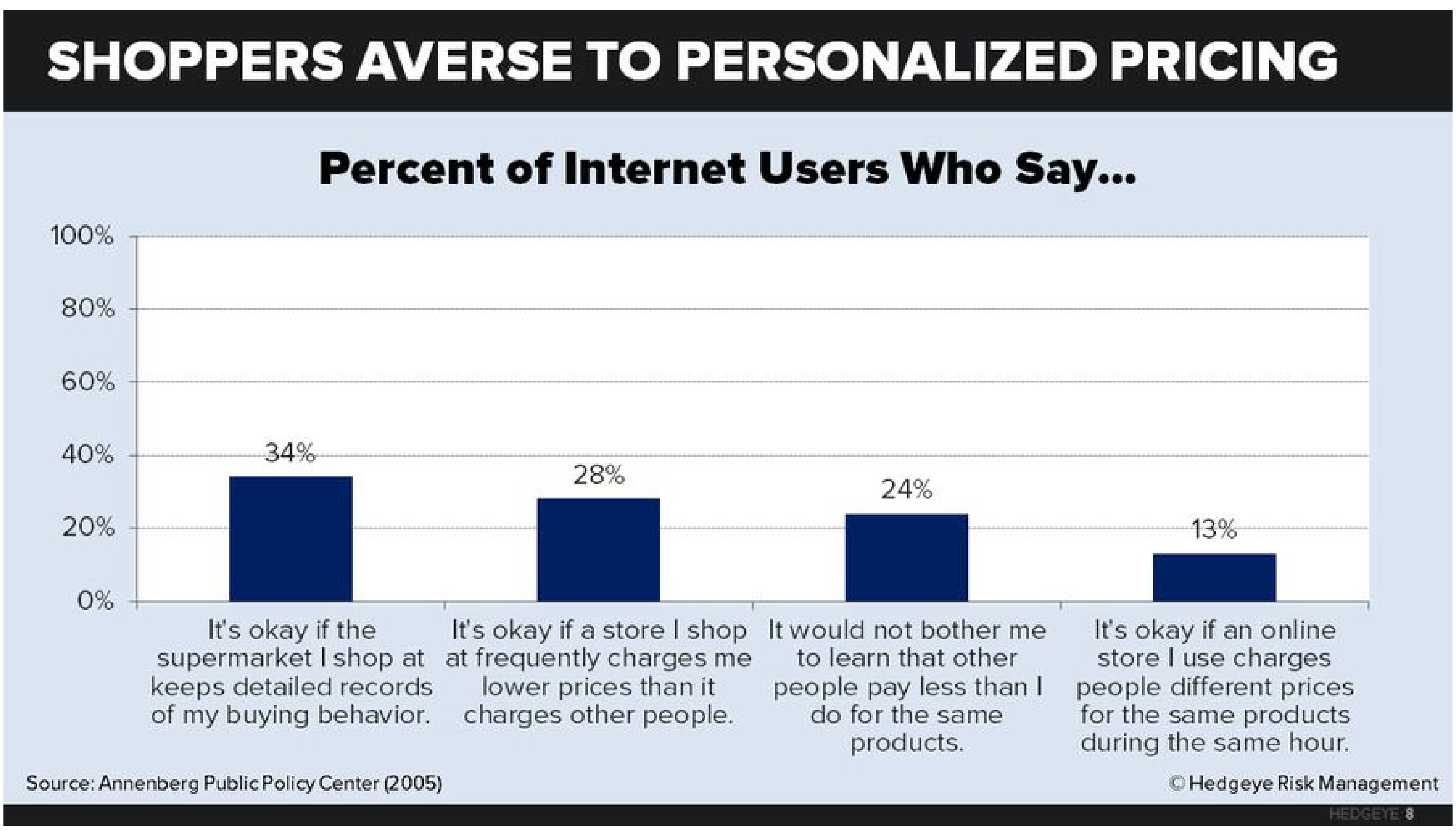
Consider how these programs operate today. As a rule, companies that practice personalized pricing completely hide the fact that a "price just for you" is part of an overall strategy designed to make them more money. Often these firms make it seem as though they are doing you a favor—as though providing a uniquely crafted price is an extra service.

Sometimes, in fact, companies will even advertise their pricing policy as a philanthropic endeavor. Federal student aid programs that require families to fill out their FAFSA enable colleges to scoop out the demand curve by offering "discounted" tuition (grants and loans) to everyday Americans who would not otherwise be able to afford it. Another example is Big Pharma: Firms routinely sell their drugs at a high list price—and then give discounts to low-income nations or individuals who can demonstrate their inability to pay the full price.

Because price discrimination operates under the radar, most consumers don't even know it's occurring. Most, in fact, mistakenly believe it to be illegal. A 2005 Annenberg Center study found that 64% of adult Internet users thought it was illegal for e-commerce sites to charge different prices to different customers—and 71% thought it was illegal for brick-and-mortar retailers to do so. Most consumers also were unaware that price-comparison sites like Expedia didn't necessarily list the best price.



When consumers *realize* that price discrimination is occurring, they object. The same study found that just 13% of consumers said it would be okay for an online store to charge different prices to different consumers for the same products within the same hour. Even if personalized pricing benefits them, most consumers object: Just 28% say it would be okay if a store charged them lower prices than it charged other people in an attempt to win them over.



Contrary to popular opinion, price discrimination is legal in most situations. There are a few exceptions. Companies cannot alter prices based on certain protected classes (such as race, gender, or religion). Additionally, in a B2B environment, price discrimination is barred under the Robinson-Patman Act of 1936 when it causes “competitive injury” to one or more entities.

Robinson-Patman was originally designed to keep suppliers from selling at a discount to chain stores, a practice that hammers Mom-and-Pop retail. Though Robinson-Patman is notoriously difficult to enforce due to its complexity and the difficulty of proving guilt, some states have similar laws on the books that complement the federal law.

Consumer concerns over personalized pricing tend to fall along generational lines.

Boomers like their privacy. As a general rule, older customers are wary of any personalized shopping experience. According to an Accenture survey, just 28% of Boomers would welcome a clothing store automatically selecting items for them, compared to 45% of Millennials. For Boomers, a retailer that knows enough to offer a different price to each individual seems intrusive.

Generation Xers: Let’s make a deal. Xers, by contrast, see personalized pricing as an opportunity to get the best possible deal. These savvy shoppers know the stakes and are willing to play the game. They are likely the ones gaming the system by looking for flights from an Internet café instead of their living rooms to get lower fares—or filling online shopping carts without buying just in hope of being offered deals.

Millennials are more conflicted. For Millennials, personalized pricing has its pros and cons.

On the one hand, young adults who grew up immersed in technology do not think twice about handing data over to retailers. Fully 57% of 18- to 24-year-olds value their personal data at $20 or less, compared to 41% of 45- to 54-year-olds. Most see no problem in handing over the information that they’ve been willingly giving away all their lives—especially if that information helps them save money.

On the other hand, personalized pricing likely sets off this generation’s fairness alarm. Millennials don’t like being “pitted” against one another because of their zip code, age, gender, or browsing habits.

THE FUTURE OF PERSONALIZED PRICING

The public is catching on. Retailers likely won’t be able to implement personalized pricing under the radar for much longer.

Going forward, personalized pricing will likely go in one of two directions. On the one hand, greater access to consumer information makes personalized pricing easier to implement. The promise of squeezing every last dollar out of the demand curve will tempt more and more retailers to roll out personalized pricing.

On the other hand, growing populist backlash against companies that prey on unsuspecting consumers may undermine the practice. As he does on so many issues, President Trump straddles the line: While his inner circle and brain trust are loaded with Wall Street CEOs whose companies are pushing the practice, personalities, he has an active populist constituency that expects him to look out for the little guy. Which way he and his administration ultimately move on this issue remains to be seen.