September 11, 2017

How to make personalized pricing work

Dr. Vidya Mahambare

For centuries local bazaars and street vendors have been central to the economic activity. Shoppers go around from stall to stall haggling over prices and the sellers size them up to decide what price to settle at. A mutually agreed sale takes place and buyers with good bargains leave as happy customers.

The bargaining mechanism enables sellers to charge different prices for the same product to different consumers. This is, of course, what economists call price discrimination. Street vendors decide on the price they quote for a particular product once they judge buyers' capacity and willingness to pay based on the individual characteristics that they observe.

This is a time consuming practice which is inconvenient and impractical in many ways, but societies rarely ask for such a system to be banned. Why is then we ask for discriminatory pricing by new age companies such as Uber or Amazon to be banned or regulated? With the help of big data analytics, technology is enabling firms to do more discretely exactly the same what street vendors do, but for millions of shoppers at a given point in time.

Most companies have been using some form of price discrimination for as long as we know. This is done either to attract new consumers, to keep them loyal, to make them pay for a brand or a better looking product, to charge them more during peak times or simply by sizing up their income. Discounts, coupons, loyalty programs, peak-pricing, bundling of products such as meal combos or tying two complementary products together such as a printer and a cartridge all these pricing strategies are different forms of price discrimination.

When markets moved from the streets to shops, inconvenience of bargaining was removed by printing a single price. But then soon sellers realized that this strategy does not maximize profits. So we moved on to coupons and discounts. People who are willing to look for discounts are likely to have a lower willingness to pay. Get them in the shops this way and add to your profits as long as the discounted price is covering up the marginal cost.

Overtime discounts and vouchers moved online. Then, the internet companies such as Groupon (re-named Nearby in India) begin to spring to sell coupons to buyers for a number of products and services. And finally, now with the help of technology, we are going back once again towards the perfect personalized pricing that street vendors are known for.

Clearly, price discrimination maximizes seller's profits. How far is it good for consumers? Using 50 million individual level data, an independent study (Using Big Data to estimate Consumer Surplus: The case of Uber, Cohen et al, NBER working paper 22627, September 2016) estimated that if UberX service was banned in the United States, consumers would have lost about $6.8 billion worth of revenue in 2015.

This consumer benefit is two times larger than the revenues received by drivers and six-times larger than the revenue of Uber. Customers stick with Uber despite having a number of other substitutes since it allows them to travel for cheap most of the time while raising the price when there is demand surge. And even at higher prices, not too many customers move away from Uber.

With so much benefit for the consumers why is there so much consumer and regulatory backlash against the new-age companies for their pricing strategies? It is to do with the lack of trust. In the process of haggling the consumers are involved in the price formation process face-to-face and settle at what both sides agree as a fair price. When technology enables companies to do the discriminatory pricing, it does not directly involve consumers. As a result, consumers perceive the prices they are asked to pay by a dominant seller as unfair. It is not clear to them how prices are formed.

Amazon had realized this as early as in 2000 when it abandoned the strategy of explicitly charging different prices for the same product and refunded money to thousands of customers after a DVD was sold this way. Even now, rather than risk stirring up consumer resentment by explicit price discrimination, Amazon and a number of other companies including Uber achieve price discrimination via more traditional ways of discounts and mega sales.

Adverse consumer reactions are also inevitable when prices can be jacked up unfairly. For example, if Uber drivers log out of the system in a coordinated matter it artificially creates a supply shortage causing a surge price. In years to come, with driverless cars becoming a reality a different form of pay-as-you-go pricing model will come up. Even this will have to be perceived as fair by consumers.

Even more serious unintended consequences can arise with a price strategy such as a 'route-based pricing' whereby trips from more prosperous areas are charged at a higher price. The Princeton Review, an online tutoring provider, prices its SAT course differently in different ZIP codes across the United States. It has been reported that with such a policy, less well-off Asians were likely to be charged a higher price than relatively rich non-Asians. This is because ZIP code pricing captured a lot of low-income Asian dominated areas along with lot of high-income areas.

With an ever increasing dominance of a few large tech companies, even if the technology allows a possibility of perfect price discrimination, consumer perceptions of price fairness will be the key to its sustainability. Perhaps, its now time again to involve consumers, at least to some extent, in the price setting mechanism. Technology can surely find a way out.

Dr. Vidya Mahambare, Associate Professor - Economics, Great Lakes Institute of Management, Chennai.

Online link - http://www.businesstoday.in/opinion/columns/how-to-make-personalized-pricing-work/story/260070.html