



Surveillance Advertising: What About Discrimination?

Tracking and profiling people for the purpose of advertising can lead to discrimination. Whether intentional or not, the potential for unfair treatment based on inferences about individuals' characteristics is one of the most serious concerns with surveillance advertising.

Discrimination in Economic Opportunities

Digital platforms are a major source for information about economic opportunities. However, evidence shows that these platforms sometimes display different opportunities to people of different demographics. This is especially concerning when those opportunities are for basic necessities such as housing, employment and credit. While discrimination in those areas is illegal, there are numerous examples of surveillance advertising enabling discriminatory practices in these categories.

For example:

- [ProPublica reported in 2017](#) that employment ads on Facebook from multiple companies were targeted to certain age groups, excluding older workers.¹
- [ProPublica reported in 2018](#) that employment ads from 15 different companies were targeted at specifically men or women, often along gender-stereotypical lines.²
- A [2020 study from Carnegie Mellon](#) found discrimination in ads for housing, employment and credit served to non-binary people.³

1. Dozens of Companies Are Using Facebook to Exclude Older Workers From Job Ads, ProPublica, 2017

2. Facebook Is Letting Job Advertisers Target Only Men, ProPublica, 2018

3. Auditing Digital Platforms for Discrimination in Economic Opportunity Advertising, Carnegie Mellon University, 2020

While discrimination in housing, employment, and credit is especially concerning, specific targeting enabled by surveillance advertising inherently allows advertisers to discriminate across all types of ads, for any type of products or services. This limits choices available to certain groups of people.

Price Discrimination

The same user tracking and profiling that enables surveillance advertising can also be used for price discrimination.

For example:

- The [Wall Street Journal reported](#) that Staples changed the price shown to users based on their location and distance from rival stores. The article also identified several other companies that adjusted prices depending on a user's location and/or browsing history.⁴
- [ProPublica reported in 2015](#) that The Princeton Review charged higher prices for SAT test prep to consumers in ZIP codes with higher percentages of Asian Americans.⁵

4. Websites Vary Prices, Deals Based on Users' Information, Wall Street Journal, 2012

5. The Tiger Mom Tax: Asians Are Nearly Twice as Likely to Get a Higher Price from Princeton Review, ProPublica, 2015

Beyond actually changing prices, companies use “price steering” to manipulate user spending based on tracking and profiling. Price steering attempts to nudge users towards particular options depending on some characteristic of the user.

For example:

- [Travel website Orbitz sorted search results](#) to show Mac users more expensive hotel rooms than users with other platforms.⁶
- A [2014 study from Northeastern](#) found that 9 out of the 16 websites they studied engaged in some sort of price steering or price personalization.⁷

How Discrimination Happens

Since surveillance advertising inherently allows ad targeting based on an individual’s personal characteristics, an advertiser can simply decide not to show an ad to certain people. Even if advertisers are prohibited from using an individual’s status in a protected group directly, an advertiser can use a proxy such as location to exclude protected groups. For example, an advertiser could use location as a proxy and exclude people in an area made up of primarily one particular race or ethnicity.

However, the automated processes that facilitate surveillance advertising can lead to discrimination even if ads are targeted fairly. A [2019 study](#) found that ad delivery is not only based on individuals’ personal characteristics; how people respond to advertisements and the amount of money businesses want to spend on advertising also play significant roles in determining who sees what ad.⁸

Ad tech companies track how different ads perform with different people. If the data show that certain individuals interact with a particular ad more than others, people like them are more likely to be served that ad in the future, to the exclusion of others in that potential audience. Furthermore, since ad delivery operates on an auction system in which businesses bid for ad targets, those that are willing to pay the most will have their ads shown to the most “valuable” individuals, while those who spend less will end up with a less desirable audience for their ads. These practices can skew ad delivery in a way that results in discrimination against certain people, even if that was not the intent.

Because the [inner workings of surveillance advertising](#) are invisible, complex, and highly automated, individuals cannot assess how the offers they see compare to those that other people receive and whether they are being disadvantaged in some way. The benefits of surveillance advertising do not justify the inherent risks of unfair treatment and illegal discrimination.

6. On Orbitz, Mac Users Steered to Pricier Hotels, Wall Street Journal, 2012

7. Measuring Price Discrimination and Steering on E-commerce Web Sites, Northeastern University, 2014

8. Discrimination through Optimization: How Facebook’s Ad Delivery Can Lead to Biased Outcomes, ACM on Human-Computer Interaction, 2019