Privacy could be the next big thing









STRATEGY

The Incredible Story Of How Target Exposed A Teen Girl's Pregnancy



Target broke through to a new level of customer tracking with the help of statistical genius Andrew Pole, according to a New York Times Magazine cover story by Charles Duhigg.

Pole identified 25 products





theguardian

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Women less likely to be shown ads for high-paid jobs on Google, study shows

Automated testing and analysis of company's advertising system reveals male job seekers



BUSINESS

CULTURE

GADGETS

FUTUR

Facebook patent: Your friends could help you get a loan - or not

by Ananya Bhattacharya @CNNTech

(L) August 4, 2015: 6:58 PM ET





MOTHERBOARD

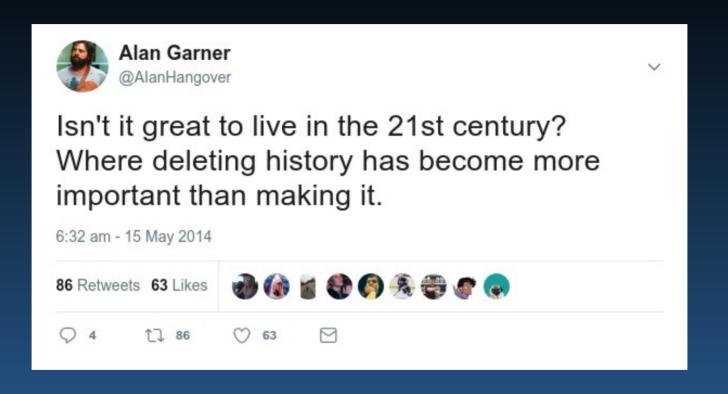


Uber Knows Too Much About You

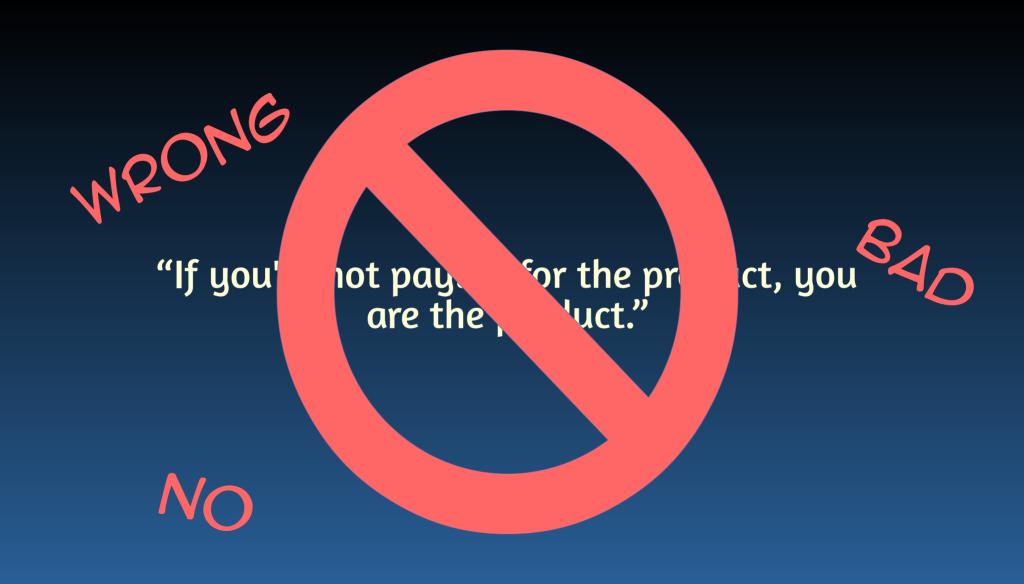
The kind of data that Uber has access to even if it's not, say, the actual contents of your email or the actual conversations you're having on your phone—is extremely invasive.



 \equiv



"If you're not paying for the product, you are the product."



"There is no correlation between how much money users pay and how well they're treated."







aggregation



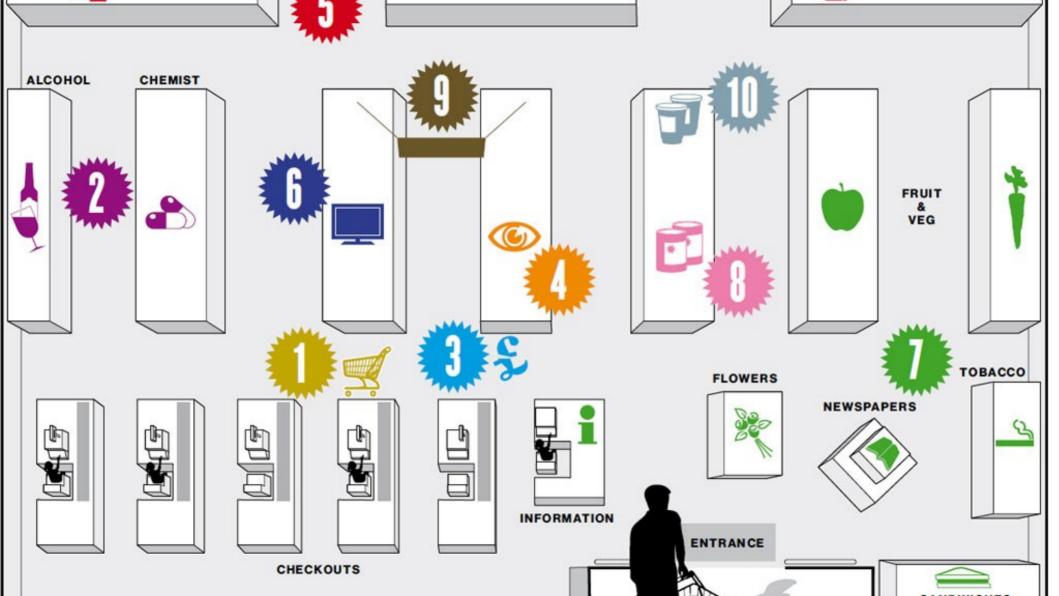








Your data collection is creepy when you use it to deduce things you weren't told and shouldn't know









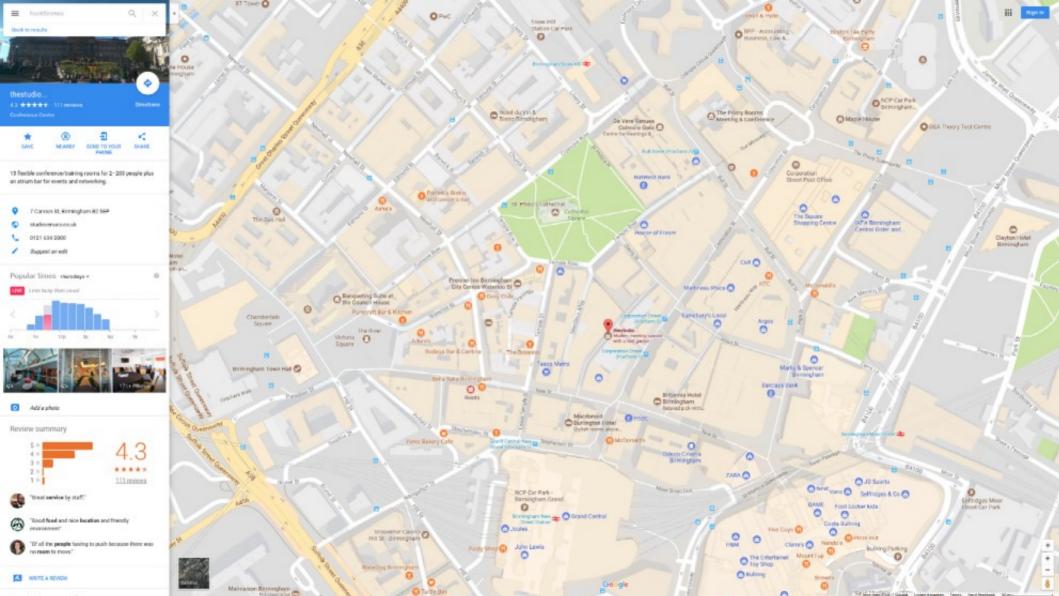


"Every aspect of a store's layout is designed to stimulate shopping serendipity"

trapped

you can't opt out

unrealistic











"If you leave your phone behind, it's like missing limb syndrome"

you can't regulate it away

THE TIMES OF INDIA INDIA

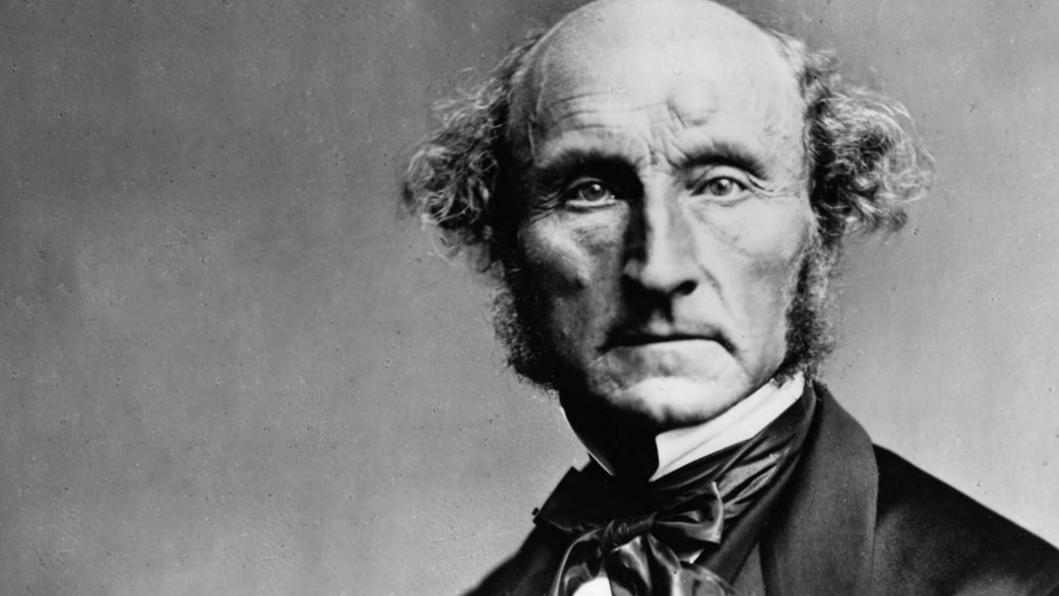
Right to Privacy is a fundamental right, it is intrinsic to right to life: Supreme Court

Dhananjay Mahapatra and Amit Anand Choudharyl TNN I Updated: Aug 24, 2017, 23:03 IST



HIGHLIGHTS

- The order affects all 134 crore indians
- The apex court overruled previous judgments on the privacy issue
- It overruled an eight-judge bench judgment in the MP Sharma case and a six-judge bench judgment in Kharak Singh case
- Both earlier judgments ruled that privacy is not a fundamental right.



"laws passed by governments are about the ninetieth most important restriction on our freedom of speech"

you can't shout



So....Mozilla knows, right, that "privacy" has never been an effective selling point for software? Like ever?

you can't reboot the public

The children of the revolution were faced with the age-old problem:

it wasn't that you had the wrong kind of government, which was obvious, but that you had the wrong kind of people

More than 70% of people would reveal their password in exchange for a bar of chocolate

technology is not the fix



matrix

Purism









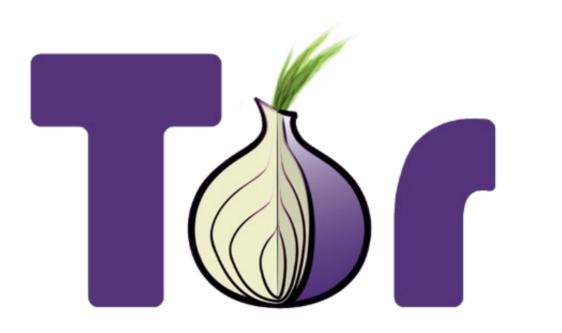


LastPass ******











"Freedoms are not being taken away; we are just afraid to use them"



no choice

the next ten years











82% of people are not comfortable with the sale of their data to third-parties in exchange for speed or convenience or product range

Half of all people have avoided doing some basic stuff online because they have concerns about how their data will be used

disrupt



The way you overcome an incumbent business is by doing battle on a field that they can't compete on

a weapon which only hurts bad people

= thedailymash

Privacy experts too paranoid even for lunch

29-08-14



The UK's top authorities on privacy law



how?

differential privacy

over pairs of the form (r,0). This proves Lemma 2. $Proof\ (Proof\ of\ Claim\ 1)$. Let p^* be the minimum over x of p(z|x). Let $q_x = p(z|x) - p^*$ and $\bar{q} = p(z) - p^*$. The variance of $\hat{p}(z)$ is the same as the variance of $\hat{p}(z) - p^*$. We can write $\hat{p}(z) - p^*$ as $\frac{2}{2^d} \sum_x q_x \chi_0(x)$, where $\chi_0(x)$ is 1 if $x \in D_{r,b}$.

The expectation of $\hat{p}(z) - p^*$ is \bar{q} , which we can write $\frac{1}{2^d} \sum_x q_x$. $\text{Var}_{r,b} \left[\hat{p}(z) \right] = \mathbb{E}_{r,b} \left[\left(\frac{2}{2^d} \sum_x q_x \chi_0(x) - \frac{1}{2^d} \sum_x q_x \right)^2 \right] = \mathbb{E}_{r,b} \left[\left(\frac{1}{2^d} \sum_x q_x \left(2\chi_0(x) - 1 \right) \right)^2 \right]$

 $4\sqrt[3]{12}\epsilon^2 2^{-d}$, for at least a $1-\alpha$ fraction of the pairs (r,b). The bit b is unimportant

here since it only switches D_r and its complement D_r . The distance between

 $Z(D_r)$ and Z(D) is exactly the same as the distance between $Z(\bar{D}_r)$ and Z(D),

since Z(D) is the mid-point between the two. Thus, the statement holds even

Now $(2\chi_0(x) - 1) = (-1)^{r \odot x \oplus b}$. This has expectation 0. Moreover, for $x \neq y$, the expectation of $(2\chi_0(x) - 1)(2\chi_0(y) - 1)$ is exactly $1/2^d$ (if we chose r with

what data do we collect?

overt and covert

Covert device specs, other apps installed, location, ...

Overt age, gender, postcode, ethnicity education level, marital status children, homeowner...

classify and identify your users



age buckets under 18, 18-24, 24-35, 35-44, 44-60, 60+

the randomised response method

lie

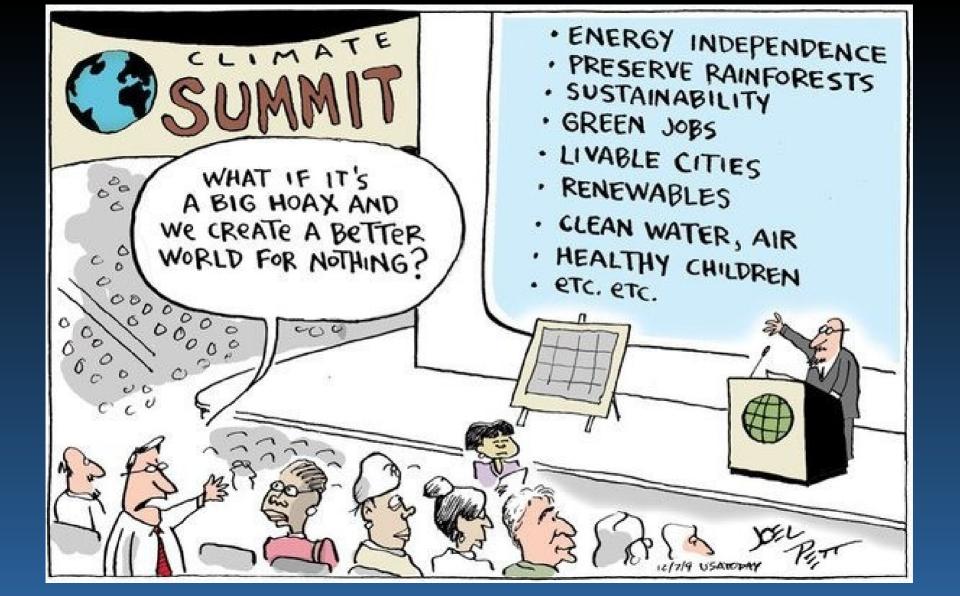
demo

tune the lies

```
If (Math.random() < 0.1) {
   age_bucket_index = age_bucket_index — 1;
}</pre>
```

data science

competitive advantage



help understand

It's not OK that you're made to feel uncomfortable

false dilemma

it's us

change the story



@sil