Technology & Ethics

Data Breaches and Social Media

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Paul Stoddard

Data Breaches

- Why rob banks? That's where the money is.
 Why hack companies? That's where the valuable data is.
- MALWARE
- Data breaches usually happen from a combination of mistakes by companies that have the data, and efforts by *hackers* who are trying to get it. What should you do if you hear a company with your data has been stolen? Wired <u>article</u>.
- Info is beautiful graphic (try filters)
- Have I Been Pawned
- <u>Dark web db of stolen credentials</u> (Dec 2017)
- The US government set up a website to advise people what to do when their data is exposed. https://www.identitytheft.gov/Info-Lost-or-Stolen

Poll – Social Media

What Social Media apps do you use?

- Facebook
- Twitter
- Instagram
- YouTube (acquired by Google)
- WhatsApp (acquired by Facebook)
- LinkedIn (acquired by Microsoft)
- Reddit (acquired by Conde Naste Publications)
- Snapchat
- Other



Let's look at some social media problems using Facebook as an example.



Facebook & Cambridge Analytica





- In 2013 Aleksandr Kogan made a FB app (a survey called "This is your digital life") that hervested data from 87 million users without their consent. This included not only the people who used the app but also their Facebook friends.
- Kogan gave the data to Cambridge Analytica.
- CA sold the data to several political organizations. *They profited from FB user's data without user consent.*
- The data was used to target FB users with political advertisements for Trump, Ted Cruz, the Brexit vote, and the Mexican election. (By the way, Steve Bannon is a co-founder of Cambridge Analytica.)
- In the middle of all this, both FB and CA threatened to sue The Guardian newspaper over its reporting of the story.
- Christopher Wylie worked for CA. In 2018 he quit and blew the whistle. <u>Interview</u>
- October 2018 FB was fined £500,000 by the UK's Information Commissioner's Office.
- In July 2019, the Federal Trade Commission voted to approve fining Facebook around \$5 billion to finally settle the investigation into the data breach, with a 3-2 vote. (*The Guardian*)
- September 2021, some FB shareholders allege that FB agreed to pay the \$5b instead of \$100m in order to protect Zuckerberg from personal liability.

Question: What ethical duties do you think Facebook's leaders have when it comes to our data?

Too much power?

• On Feb 7, 2019 Germany's Federal Cartel Office, the country's antitrust regulator, <u>ruled</u> that Facebook was exploiting consumers by requiring them to agree to data collection in order to have an account, and has prohibited the practice going forward. - Wired Magazine

Regulators said that because FB has such <u>market power</u>, the user agreement is not really free consent.

2021 - Ireland's Data Protection Commission (DPC)
has issued Facebook-owned WhatsApp a financial
penalty of €225 million for breaching European data
privacy rules. – computing.co.uk



Facebook abuse by users

• Facebook was used to stir up hatred against the Rohingyas in <u>Myanmar</u>. The UN called the results "textbook genocide".



Too big?

- According to Wikipedia, Facebook has 2.85 billion monthly active users (as of 31 March 2021). That's bigger than any country on earth.
 It was launched in 2004, only 17 years ago.
- Twitter has 353 million monthly active users (<u>Backlink</u>). That's bigger than the population of the USA (the 3rd most populous country in the world).



What about an oversight board?

- In November 2018, a <u>Facebook Oversight Board</u> was proposed by Zuckerberg. The first members were announced in May 2020.
- This Board is supposed to be independent and will make decisions about blocked or removed content (freedom of speech decisions).
 Note that these are appeals after FB takes action.
- In May 2021, the board upheld a FB decision to temporarily ban Donald Trump from the platform. (He was banned after posting videos during the Jan 6th insurrection.) The Oversight Board also said Facebook must follow a "clear, published procedure".
- Last year, a group of people announced "The Real Facebook Oversight Board". It includes Roger McNamee an early FB investor (now critical of it), Professor Shoshana Zuboff, Philippine journalist Maria Ressa and others. They are concerned about the independence of Facebook's Oversight Board.

You may have heard about "Section 230" in the news.



- The 1996 Communications Decency Act, Section 230 says:

 "No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider" (47 U.S.C. § 230).
- Therefore, Social media platforms cannot be held liable for things posted by users.
- This was intended to encourage innovation and free speech. But it has also protected platforms from things like fake news going viral.
- There are conflicting opinions about changing this section.

Social Media impact on journalism

- "Free" news online has dramatically eroded traditional journalism.
- Fake news has gone on in newspapers long before social media. It was called "yellow journalism". But it spreads much faster online.
- <u>Echo chambers</u> amplify "confirmation bias". People only see news they agree with. But democracy depends on citizens hearing and understanding competing views.

 What is <u>clickbait</u>? Websites use sensational or fake news to attract viewers.
 Why? Because they are funded by advertisements.



Other Social Media Issues – Bullying

Trolls vs free speech – PBS <u>explanation</u> (7 minutes, 2012).

 Some people are really mean when they can be <u>anonymous</u> online.
 Can we teach them ethical behavior?



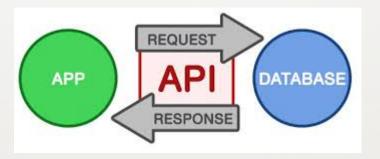
• Cyber-bullying - <u>one study conducted early in the pandemic</u> found a 70 percent increase in bullying among kids on social media and chat forums. (2020)

What should be done?



Could this help (a little)?

• What is an API? Application Programming Interface. Example: your phone getting a weather forecast



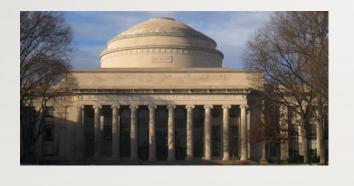
• This API (from Jigsaw, a division of Google) measures "toxicity" of online comments. http://www.perspectiveapi.com/#/

Programmers could use this in their social media apps, but it's optional, of course.

Here are the things Facebook did to protect the 2020 US election (link is here)

- We won't accept new political ads in the week before the election.
- We'll remove posts that claim that people will get COVID-19 if they take part in voting, and we'll attach a link to authoritative information about the coronavirus to posts that might use COVID-19 to discourage voting.
- We will attach an informational label to content that seeks to delegitimize the outcome of the election or discuss the legitimacy of voting methods, for example, by claiming that lawful methods of voting will lead to fraud.
- If any candidate or campaign tries to declare victory before the final results are in, we'll add a label to their posts directing people to the official results from Reuters and the National Election Pool.
- Launching a US 2020 Voter Information Center

Did social media affect the election?



MIT research says:

- Social media was unlikely to change who people voted for.
- However, it did affect voter turnout. Example: Russian "trolls" targeted African Americans in an attempt to get them to stay home and not vote.
- Related to this, MIT also found that "fake news" spreads much faster than truth. Using 10 years of Twitter data they found fake news is 70% more likely to be re-tweeted, and it moves 6 times faster. The reason? Fake news appeals to the human mind's appetite for something novel.

Speaking of elections...



- Did you know there are apps that can tell you who voted in prior elections? It's public information. (They don't tell which candidates people voted for.) Some of the apps are:
 - VoteWithMe
 - OutVote
- <u>Information</u> about "Voter Files" and their growing use.

Should we count on companies to do a better job, or regulate them?

- <u>Gartner Top 10 for 2019 (#9)</u> Conversations regarding privacy must be grounded <u>in ethics</u> and trust. The conversation should move from "Are we compliant?" toward "Are we doing the right thing?"
- <u>Privacy by design</u> Consider ethics when designing software, not after problems arise.
- Jess Whittlestone at Cambridge U. <u>says</u> ethics needs to be *built in* to AI.

We'll look at regulation in a future class.

From an article in MIT Technology Review Oct 5, 2020 That's a real

• Facebook's former director of monetization, Tim Kendall, gave <u>testimony</u> before Congress that suggested a new way to look at the site's deleterious effects on democracy. <u>Kendall compared social media to the tobacco industry.</u> But the comparison is more than metaphorical. It's a framework for thinking about how public opinion needs to shift so that the true costs of misinformation can be measured, and policy can be changed.

job?

• **How so?** It might seem inevitable today but regulating the tobacco industry was not an obvious choice to policymakers in the 1980s and 1990s, when they struggled with the notion that it was an <u>individual's choice</u> to smoke. Instead, a broad public campaign to address the dangers of secondhand smoke is what finally broke the industry's heavy reliance on the myth of smoking as a personal freedom. <u>Like secondhand smoke</u>, <u>misinformation damages the quality of public life</u>.

Additional resources that may interest you



- "The Social Dilemma" on Netflix. See also <u>TheSocialDilemma</u>.com.
- "The Great Hack" on Netflix is about the FB-Cambridge Analytica scandal.
- "Hacking Your Mind" is a 4-part series on PBS.

The Age of Surveillance Capitalism:
 The Fight for a Human Future at the New Frontier of Power
 by Shoshana Zuboff, Harvard
 (This book is over 500 pages of dense prose.
 Suggestion: Look for interviews with the author.)

