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Online Social Networks
23 March 2022
I pledge my honor that I have abided by the Stevens Honor System. -Nidhi Parekh
Assignment 5: Privacy and Ethics in Online Social Networks

PART I

Everything We Know About Facebook's Secret Mood Manipulation Experiment

1. Summary of the article

This article discusses the controversial experiment performed by Facebook in 2012. Facebook's social contagion experiment had to do with Facebook tampering with the News Feed of approximately 700,000 Facebook users for one week. This was revealed to the public as part of research purposes. According to their researchers, the purpose of this study was to analyze users' emotions by showing either more positive or negative related content than average content. They also found that reducing emotional content on News Feeds made users post less. The researchers were heavily criticized for conducting this experiment for various reasons. The researchers did not have a well-designed experiment. They placed their trust in the tools without having a full understanding on the limitations of the tools. The LIWC 2007 tool, which was used for scaling or rating emotional posts written by users, was not meant to be used for shorter texts. While this experiment was legal, it does not mean it was ethical as they were manipulating users' emotions without their awareness. Regarding the approval of this study, Cornell University's Institutional Review Board(IRB) decided that a review was not needed since the results were received after the experiment was conducted. A major concern to this day remains how often Facebook manipulates their users' News Feeds due to the lack of informed consent.

2. Essay on ethics in online social networks

After reading this article, I feel like this experiment was not ethical. Manipulating users' emotions without having any idea about it can possibly cause severe reactions. Additionally, Facebook claims that users offer consent when users are shown the extensive terms of service and they agree to the data use policy. According to the article, "...the data use policy in effect when the experiment was conducted never mentioned "research" at all—the word wasn't inserted until May 2012"(4). Facebook could have offered users a clearer message for volunteering in an experiment. I believe that any type of experiment or study being done without consent is considered a violation of ethics and law. Consent should always be mandatory because people participating in studies should be aware that they are part of it. They should also have the option to opt-out if they don't feel comfortable partaking in an experiment. Consent also means that people should also be aware of how much information is being obtained and what type of information as well.

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I pledge my honor that I have abided by the Stevens Honor System. -Nidhi Parekh Another incident that happened to be unethically performed around the same time as Facebook's infamous experiment was with OkCupid in 2013. OkCupid, an online dating app, published three examples of experiments the firm performed. The first experiment was removing all users' pictures. The second experiment was removing their profile text and just showing their profile. The final experiment is where OkCupid are assigned a 'match' rating, which shows how compatible they are with another person. Research found that if a user was told another user had a high compatibility score instead of a low one, they would be more likely to message them. The experiments also reveal how easy it is for a social media platform to manipulate users without their knowing. While the intention was to help users, the issue remains where the users were not informed and their personal data is manipulated for research purposes, which is unethical.

Nowadays, it is difficult to determine what can be considered as completely safe and ethical. Informed consent, voluntary participation, no physical or mental harm, confidentiality, and assessing relevant components are some of the major principles for ethical research. I believe that if these principles can be followed, researchers could avoid problems regarding ethical issues.

Facebook's experiment occurred in 2012, which happens to be 10 years ago now. With technology continuing to grow, there is definitely a good possibility that Facebook would do something like this again. The problem is that users don't know when these experiments would be happening. They could be happening at any time because of the lack of informed consent, which Facebook got away with in 2012. Due to the lack of informed consent, sometimes it is too late before users can do anything about it.

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PART II

Is It Time to Delete TikTok? A Guide to the Rumors and the Real Privacy Risks

1. 7 Questions

1. What Data does TikTok Gather?

- i. Essentially, TikTok gathers information based on the private messages on the app, the videos you watch, your country location, phone contacts, internet address, and the type of device that is being used. There is possibly more information being obtained from the app but can't be accessed because of TikTok's obfuscation.
- ii. I feel like because of TikTok's obfuscation, we may never really know what other information they might have on their users, which is a pretty scary. Also, the fact that there is 125 pages of typed data, that is an insane amount of data that is being sent from the app to the Internet.

2. Does the TikTok app do anything shady?

- i. There are a few instances when TikTok did some shady acts. First, app developers from a company called Mysk found out that TikTok was accessing content from users' iPhone clipboards every few seconds, even when TikTok was running in the background. Second, an Israeli security firm found bugs in the app that could let attackers access personal data. Lastly, TikTok paid \$5.7 million to the Federal Trade Commission for violations of America's children's privacy law in 2019.
- ii. With all these bugs and other issues found in TikTok, this really makes me a little suspicious of the company. It also feels like there is more data being collected than we know. Additionally, the privacy concerns are shady especially because most kids nowadays use TikTok, and their personal information can be tracked and that is very scary.

3. What are the U.S government's concerns about TikTok?

i. TikTok is under national security review in the U.S since they were accused of censoring videos to fulfill requirements of the Chinese government. The other concern is that China can potentially collect personal data on Americans. China's government has a lot of power over their technology companies and the companies has to follow the demands of the government. Nidhi Parekh Professor Dugas Online Social Networks 23 March 2022

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- ii. Based on the response, China actually has the ability to collect personal data on as many Americans or other nations as they want. Even the U.S Army banned TikTok on official devices. Once again, it is very scary.
- 4. Does TikTok data get stored in China?
 - i. According to TikTok, their data is stored only in the U.S and Singapore, but there have been references to Internet addresses in China's companies like Baidu and Igexin. There was also a lawsuit filed in California in 2019 regarding this issue. However, Nash-Hahn and the lawyers for this case refused to comment on this case.
 - ii. I think the most suspicious part about this is when Nash-Hahn and the lawyers for the case declined to comment. Nash-Hahn's only comment was "We neither use code of, nor send any data to, Baidu or Igexin." I liked one of the points mentioned in the answer, "And good practices today don't necessarily mean good practices tomorrow". While it is good to hear that none of the data is stored in China, there's an unfortunate possibility in the future.
- 5. Can the Chinese government force TikTok to hand over your data?
 - i. Although TikTok claims that the Chinese government never asked for any personal data, it remains a question as to how well TikTok can actually resist the order. For example, in Hong Kong, a new sedition law could force companies to release their data to China. The U.S has previously accused the Chinese government of espionage, in 2017.
 - ii. Even though the Chinese government has not asked for any data, it's a problem because it can happen in Hong Kong. Seeing that the U.S had an issue with the Chinese government regarding espionage in the past, I really hope that TikTok would not do such a thing.
- 6. Is it better or worse than Facebook?
 - TikTok happens to gather the same amount of data as Facebook.
 However, Facebook not only gathers data, but it tracks users inside other apps, websites and even when the phone is off, which isn't something seen in TikTok.
 - ii. It's been known from all over the world how infamous Facebook is when it comes down to security or privacy concerns. It was even mentioned in the statement that Facebook had the largest fine in FTC's history, a \$5 billion settlement, due to privacy invasions. After reading through the article, it's really uncertain as to whether or not TikTok is better than

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Facebook. TikTok could be just as invasive and just better at concealing
their collected data than Facebook is. Due of the uncertainty for TikTok, it
kind of becomes scarier with what they do with our data. At least the
public is more aware about the privacy invasions with Facebook.

- 7. Is there anything you can do to reduce your privacy risk and keep using TikTok?
 - i. The best option is you can keep using TikTok without having to input any personal information in TikTok. This means keeping your identity hidden by putting a fake name and a disposable email-address. Another way is you can also turn off personalized ads which can stop TikTok from using your information to target you.
 - ii. Personally, the list of ways to reduce your privacy risk in the statement is actually good and useful. By not inputting your real information, you are able to use TikTok without any worry of your data being tracked. The only thing is that a platform like Facebook was able to collect data on other apps you use, which might possibly contain your personal information. It is unclear whether TikTok does the same thing or not, which is something to keep in mind of. The other thing is TikTok is used where people tend to share personal stories or reveal their face, so even that should be kept in mind to avoid doing in TikTok.

2. The TikTok privacy/security concerns

I had TikTok on my phone for approximately a week or two before I was told that China invented TikTok. I was also told about the possibility of China collecting personal data without the users knowing and other security concerns. This led to me deleting the app, but it also made me more careful about how much information I have on other platforms. That's why I now try limiting the amount of information on other apps like Facebook and Instagram. I usually try to double check on what to do, with someone who might be more aware of security and personal data issues. Facebook is definitely not any better than TikTok, knowing that it also tracks their users even when they are not using the app, which is definitely a problem.