#### **Brandon Patton**

## Assignment 06

# I. Summary of Facebook Mood Manipulation document

Over the course of a week in January of 2012, Facebook engaged in a user study centered on manipulating user data. This was facilitated by the introducing of specifically considered positive or negative media by Facebook data scientists into around 700,000 users' Facebook feeds along with identifying and notifying any substantial change in what users ended up posting as a result. Facebook's subsequent defense of this study was that in efforts to improve their service, this data was vital as it allowed them to see how people responded to different types of content. They also spoke highly of their internal review process. In a later statement however, Adam D.I. Kramer, one of the study's authors and a Facebook employee claimed the results of the study were deemed too small to statistically detect any real change, seemingly contradictory to their latter claim of this study being vital to seeing how users respond to different types of content. The study itself documented an overall small effect on users with change being recorded as one tenth of a percent. Despite this seeming like a small number, this one tenth of a percent would have corresponded to "hundreds of thousands of emotion expressions in status updates per day" in 2013. A second conclusion also shared by the study was that if Facebook reduced the amount of either positive or negative content in people's feeds, the amount of words people would type into Facebook would consequently decrease. An important point is made about the fact that the study would take apart certain sentences and rate positivity/negativity based on separate words rather than the sentiment of the entire sentence, resulting in a sentence like "I am not happy" to get a +1 negative for the word "not" and a +1 positive for the word "happy" which is clearly not an accurate analysis. The study was also conducted before an institutional review board was consulted and approved on the basis that Facebook had done user manipulation like this before. It is noted that Facebook did not have informed consent regarding this study and those like it since the parts of the Terms and Service that are relevant to this experimentation are buried deep in more than 9,000 words of legal jargon of which almost no user reads enough of to find the parts in contention. It is also mentioned off-hand that the Army Research Office sponsored this research, though this identification of sponsor funding was removed thereafter.

### II. Ethics of Online Social Networks

The ethics surrounding the practice and use of online social networks in user studies are always very evident after stories similar to the Facebook Mood Experiment reach the public. Once people are aware of being manipulated for user studies, regardless of the perceive nature and benefit of these studies, there is outcry and outrage against such practice and people feel as if their privacy is violated. The social network companies have also conveniently constructed their systems in favor of themselves rather than the users; their permissions to use user data in any way they choose is quite briefly outlined in a massive document of legal text that almost no user if any reads to the fullest extent. Facebook and other companies know this latter sentiment to be true yet hide their true intentions away in their terms and service because they know that it is technically legal under the current restrictions of the law. Recently however, Facebook has updated their privacy information available to users and has made efforts to make the needed information more available to concerned users, although much of this information is available only after signing up for their service. Facebook and other companies intentionally manipulate and dodge ethical trouble in the legal grey area surrounding privacy, and in order to protect their privacy users are left really with only one option: to not use these online network services at all. Users should be completely informed on the true intentions of Facebook and other online social network companies regarding their user data, and this information should be available before signing up for their services. To withhold their true intentions is somewhat tyrannical, especially since they often ensure their users and skeptics alike that they do a good job and have rigorous internal and external reviews of their user data conduct. This basically means we have to trust them to make the right and ethical decisions they claim they abide by since there is no alternative to check their true intention for being ethical. I hope that this could not happen today; however, it is hard to even know if right now Facebook and other online social network companies are acting ethically. I do think that if this kind of manipulation of user data was exposed today, there would be even more outrage than in the past and perhaps something might actually be done to check these social media giants as a result.

## III. Logging in with Facebook

Several companies were found to be making use of Facebook APIs when users employed their Facebook login to make accounts for other services. Users are able to essentially connect their Facebook accounts with these services for convenience of login, but also sign up for

unforeseen usage of their personal data and Facebook account. Third party companies that use these APIs are easily able to link the users account in the current service to their personal Facebook account and thusly are able to access valuable user data not normally available through the normal signup procedure of the original service. These companies (Lytics, ProPS, Tealium, Forter, and OnAudience) claimed to have zero interest in the user data connected through the user of Facebook APIs as well as pledging that they did not sell this data to ad companies or other online merchants. Despite this sentiment, I find it interesting that these companies ceased their connection and use of these APIs soon after they were found out to be using them. This is because if they truly had not had interest or a motive to use the capability of these APIs, they would have stopped using them a long time ago. On the subject of using one's Facebook login to sign up for other services, I am skeptical and have thusly never done so myself despite using many services that offer this option. I have always preferred to make a new account for each service I choose to use in order to avoid any unnecessary linking or information going to social media sites. I would implore users who have done the latter connecting to reevaluate their choices in this regard especially in light of this article. It is good practice to keep a number of accounts to sign up for services with so that when one gets compromised, one's whole host of services are not also compromised.

I pledge my honor that I have abided by the Stevens Honor System.

**Brandon Patton**