A Care Ethics Analysis of Facebook's Data Privacy Misuse

A Research Paper submitted to the Department of Engineering and Society

Presented to the Faculty of the School of Engineering and Applied Science
University of Virginia • Charlottesville, Virginia

In Partial Fulfillment of the Requirements for the Degree

Bachelor of Science, School of Engineering

Harshil Pareek

Spring 2023

On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

Advisor

Benjamin Laugelli, Department of Engineering and Society

Introduction

The rise of social networks, and particularly Facebook, has transformed the way we interact with others across the world and access information within a blink of an eye. With over two billion active users, Facebook has become a central hub for social and political communication, connecting people from all over the world in ways that were previously unimaginable. From sharing personal updates and photos to organizing political movements and events, Facebook has become an integral part of our social fabric. However, this rapid expansion over the last 15 years has also brought about new challenges regarding the impact of social media on society, including privacy concerns of user information and the manipulation of public opinion. Specifically, the role of Cambridge Analytica and their partnership with Facebook exploited the privacy of user data and violated numerous laws set forth by the Federal Trade Commission (FTC), in which a \$5 billion fine was imposed but no serious modifications to the law were made. What this penalty failed to address is the privacy and other concerns stemming from Facebook's release of "approximately 87 million Facebook users' data," (Kozlowska, 2018) which was exploited without user authorization and could continue to occur in the future. If the unsanctioned distribution of confidential user information continues and their information falls into the wrong hands, implicit biases will originate between users and their personal lives could be at stake of being compromised.

Through the ethical framework of care ethics, I will investigate the examples of Facebook bypassing authorization processes to explain that they are morally responsible for their role in allowing user data to be distributed for illicit purposes. I will follow this with examination of the framework of care ethics and the responsibility of Facebook to uphold this condition. To prove that Facebook's lack of transparency with its users up until and during the Cambridge Analytica

scandal was immoral, I will examine the three ethical components of care: attentiveness, responsibility, and competency. I will show that Facebook's actions were immoral and hindered its relationship with its users by citing Tronto's stages of care, penalties drawn from the Federal Trade Commission, and journal articles written by scholars.

Background

To offer context, Facebook holds the claim that every user's personal information is promised to be kept private and away from marketing advertisers. In 2013, a third-party application hosted on Facebook called 'thisisyourdigitallife' was created which collected profile information of over 300,000 users that downloaded the app, "which consequently led to the full breach of over 80 million users." (Kozlowska, 2018). This influx of data was then sold to Cambridge Analytica, a firm that uses data to determine various behavioral traits and political affiliations. Cambridge Analytica then used this data to build targeted advertisements for users regarding the 2016 Election. After Facebook uncovered these sequence of events, they demanded that the data be deleted but could not ensure that copies were not created, which resulted in the mega-corporation hiding this information until the news of the breach became public in 2018.

Literature Review

Several scholarly sources have investigated the impact of user data distribution on the biases formulated against these users through algorithmic "propaganda" aimed to emotionally strike them. The following analyses focus on the impact of unauthorized user data distribution on implicit biases, but fail to describe how these said convictions can exhibit a lapse in the use of care ethics in defining credible and trustworthy social media platforms.

In Facebook-Cambridge Analytica data harvesting: What you need to know, Rehman argues that Facebook has always been negligent of user privacy. Their entire model and algorithm is centered around monetization and commercialization. He prefaces by providing context into how Facebook stores all the generated user data to run targeted advertisements, and poses how there were significant security threats through third-party applications. He continues by noting how Cambridge Analytica took this data to develop advertisements that swung the 2016 U.S. Presidential Election and led Facebook to claim no responsibility in this massive data leak. Rehman discusses the different approaches that Facebook took to prevent a situation like the exploitation of 2018 from happening again. He cites that Mark Zuckerburg initiated a policy that, "Further apps will be audited for any suspicious activity and app developers will be banned from the platform if they don't adhere to a full audit. If Facebook finds out that users' data has been misused, then anyone who has been affected will be notified." (Rehman, 2019). While Rehman provides context on the case regarding the invasion of user privacy and notes some of their wrongdoings, he fails to consider the relationship Facebook held with its users and how their lack of care led to users' lack of trust in the platform.

In *Privacy and user awareness on Facebook*, Nyoni and Velempini analyze users' awareness of privacy on Facebook. The initial observation phase of data collection collected samples from over 357 Facebook users in which 67% of users' personal information was partially available and 33% were fully available. They furthered this by conducting a study to analyze the privacy settings users had set. In a small sample size of 25 people, they showed that 22 of them never thought to set their privacy settings on Facebook. Furthermore, "94% of users were either sharing personal data daily or weekly, exemplifying the wealth of personal information on Facebook." (Nyoni & Velempini, 2018). Through this, they argue that Facebook

needs to provide more privacy as users' personal information could be in danger. They stress that users also need to be trained on privacy settings. The study focuses on the user's awareness of their privacy settings but fails to analyze the ethical relationship between Facebook and its users.

Privacy has become a pressing issue due to the rise of the internet and social media platforms like Facebook. The Facebook-Cambridge Analytica scandal is a prime example of unprotected user data being mishandled. Although it is agreed that more user privacy is needed, the scholars studying the Cambridge Analytica scandal fail to judge the actions of Facebook in response to it. I will build my analysis on the relationship Facebook fosters with its users, and how it treated this relationship in the midst of the Cambridge Analytica scandal.

Conceptual Framework

The immorality and carelessness of Facebook's actions with critical user information can be further analyzed with care ethics. Facebook's network failed with respect to Cambridge Analytica by failing to privatize sensitive user information that Facebook prides themselves in protecting, and the care towards their users will be assessed to determine the morality of the actions they took in the midst of the scandal. According to Fisher and Tronto, Care is essentially split into four phases: caring about, caring for, caregiving, and care-receiving. "Caring about' involves paying attention to the need for caring... 'caring for' refers to someone assuming responsibility to meet a need... 'caregiving' is the actual material meeting of the caring need... 'care receiving' involves the response of the person that received the caregiving." (Fisher & Tronto, 1990). These four phases resemble what "good caring" is in terms of an actor and its network. In Tronto's *An Ethic of Care*, care involves power relations and dynamics, in which there is an "imbalance in power among caregivers and care receivers." (Tronto, 1998). Using

this, it can be determined whether corporations as actors and the networks they exhibit can give improper care to its consumers.

Care ethics is defined as an ethical theory that stresses the importance of relationships, and denies that development of morals does not come from learning general moralities. As a social responsibility, engineers owe a duty of care for the technological developments they make. In Engineering specifically, "an employer/employee has to ask themselves how they as part of the enterprise can best deal with the interests and rights of others" (van de Poel, 2011), as this can be achieved through an attitude of attention, responsibility, and care.

Through the lens of care ethics, I will question whether Facebook immorally treated its users with distributing data to Cambridge Analytica. I will do this by characterizing the power structure of Facebook and its users, including the privacy agreement they require users to oblige to in order to create an account. This will show the expectations of care Facebook owes to its users, and it will determine whether or not Facebook gave the appropriate amount of privacy and care to their users using the aspects of Attentiveness, Responsibility, and Competency.

Analysis

Facebook was the first major social network to gain traction amongst its users and pledge their everlasting service to the customer, making their services free and seemingly easy to connect across the world. Through the years, however, they had developed privacy guidelines that allow for user data to be exploited and amended measures for users to restrict access altogether. This led to the Cambridge Analytica scandal where "users were unaware of Facebook's minimal privacy restrictions, nor that they had consented to it." (Nichol, 2019). Within this analysis, an argument will be made regarding Facebook's failure to notify its users of

the scandal and respond to the world using the ethical components of care: attentiveness, responsibility, and competence.

Attentiveness

Facebook failed the stage of Attentiveness as they didn't display this care to its users as they chose to instead priortize a stronger relationship with advertisers for monetary benefit.

Attentiveness is described by Tronto to be the quality of individuals to become aware of others' needs. It is most synonymous with Fisher and Tronto's "care-about" philosophy stated earlier, and it is "noted to be the first step to care, which should be followed by a responsibility to respond to this need." (Klaver & Baart, 2011).

It is firstly critical to determine whether Facebook was aware or negligent of the need of care towards its users, specifically within the case of Cambridge Analytica. According to Kozlowska, the argument that this need would be providing privacy measures for their users is not entirely truthful, "Rather, it is more so due to the lack of transparency in how Facebook uses its data and sets up its platform." (Kozlowska, 2018). Facebook has lengthy user agreement policies that are too technical for the standard user to comprehend, so users look past it and place their unequivocal trust in the corporation to "do the right thing".

Stemming from multiple sources, it is evident that Facebook leaves user data unprotected to focus more on their relationship with advertising firms rather than the actual world they claim to connect. Advertisers can gather this unprotected data to target advertisements, leading to greater profit margins for Facebook. Facebook's emphasis on their relationship with advertisers and the plentiful revenue stream has blinded them from providing a safe network and the necessary care towards its users. As a result, their self-interest became dominant which resulted in their failure to maintain transparency. Users were unaware of the need to restrict their privacy

Analytica and used to influence the 2016 presidential election. Through the actions of Facebook leading up to the scandal, it is evident that they selfishly failed to provide the proper amount of care into their relationship with its users and lacked "attentiveness". Facebook failed to see the need for transparency with its users and instead built a stronger relationship with advertising firms. However, Ertugan conducted a study that assessed the effectiveness of Facebook advertising. It showed that users were able to connect and build a beneficial relationship with consumers. Therefore, it could be argued that although Facebook was risking user privacy, "their relationship with advertisers was helping users find products that they need easily." (Ertugan, 2017). Although this is a compelling argument, it should not divert from the fact that users were unaware of the invasion of their personal privacy and the phrase "two wrongs don't make a right" embodies that this neglect is still the issue at hand.

Responsibility

Facebook failed to practice responsibility in its response to users' realizing their information was compromised, as they didn't take necessary actions to protect their users and own up to their actions. The second stage of care as mentioned by Tronto involves responding to and caring for the need, aligning with the ethical principle of responsibility. In a relationship, when there is an evident need from one entity, the other must respond with the appropriate action. It is what binds someone to be morally responsible and meet the needs in situations of care. To hold Facebook morally responsible for the leak of sensitive user data, it is imperative to analyze the timeline leading up to and including the Cambridge Analytica scandal and determine whether or not Facebook took appropriate measures to maintain transparency with its users. This

will conclude that in the midst of the scandal, Facebook was repetitively made aware of the data leaks and yet still failed to take appropriate action.

The first bit of skepticism Facebook faced with user data occurred in 2010 when they launched *Open Graph* in order to gain access to users' personal information. It was developed to expand the platform faster and provide users with more attractive information. There were concerns about expanding the number of people who could see user data, but Mark Zuckerberg, "signed a consent decree with the Federal Trade Commission stating they would not share user data without their permission." (FTC, 2019). Much of the scandal started in 2013 when Aleksandr Kogan developed the *thisisyourdigitallife* application that was designed to be a "silly" personality quiz. Some of the shocking data we now know originated from this quiz as, "300,000 users took the quiz, which, given the loose privacy settings on Facebook, allowed Kogan to harvest information on millions of Facebook profiles." (Meredith, 2018). This steamrolled the process of Cambridge Analytica gaining unrestricted access to sensitive user information.

In 2014, Facebook was made aware of this and incorporated a restriction on their privacy settings that allowed outside applications to only gain access to a user's friends' profiles if allowed. In 2015, Cambridge Analytica was hired to work on the campaigns of Ted Cruz and Donald Trump, in which they used previously harvested data to build profiles on people who could be most influenced by advertisements. Later that year, Facebook asked Cambridge Analytica to erase the data models and algorithms they developed, but they disregarded the request. In 2018, the news became public and users were naturally shocked and outraged. Facebook responded with a public apology for not adding protective measures for user data followed by developing more restrictive measures such as revoking the app's permission to your data as well as if a user is inactive for three months, among several others.

Through the events that transpired in the aforementioned timeline, it is clear that users were completely unaware that their data was being harvested by a third party organization until media sources broke the news. Facebook was aware of the situation three years in advance and failed to inform the users about the problem. They believed that although the application was illegally harvesting the data, users never checked their settings and denied access, thus agreeing to their data being sharable. This seemed to shift the blame of the situation on the users, but the users were defenseless and unaware there was even such a setting to do so. In a separate study conducted by Johanna Calbalhin in 2018, "88% of users have not read or were unaware of Facebook's privacy agreement." (Calbalhin, 2018). Their failure to be attentive and "responsible" to their relationship with users built the foundation for when they needed to take immediate action. Instead of informing the users early on that their data was essentially compromised, they chose to play it off and make small changes to the platform in hopes that the spotlight would stay off of them. Facebook's lack of transparency in the wake of the Cambridge Analytica scandal was immoral. Releasing the story would hinder their public perception and substantially drop their stock prices, so they contained it for two years when it would have been in the users' best interest to inform them. Not doing so shows a lack of commitment to its users and a failure to be ethically responsible in providing care to users.

Competence

Finally, Facebook failed to show competence to its users' in taking proper measures to ensure care after they gave Cambridge Analytica the data. According to Tronto, Competence judges the quality of the care one gives based on a need and is the third step to care. It ensures that one is taking appropriate actions to provide care, and also defines who the caretakers are and how well they do their work. In determining Facebook's ability in providing care to its care

receivers', they failed to take responsibility and justify their actions. In regards to the previously mentioned timeline, Facebook ordered Cambridge Analytica to delete the data they had harvested from the *thisisyourdigitallife* test, which they claimed they did, but in truth they didn't. Rather than demand to see proof and confirm that the data is in fact deleted, Facebook left matters where they were and chose to not readdress the matter. In regards to care, Facebook failed to do the bare minimum in ensuring that user data was properly deleted. Doing any more than putting in the formal request would have drawn more unwanted attention to the situation. When the scandal went public, Facebook immediately took a stance on defending itself on the legality of the situation. They claimed that users technically agreed to share their data, and thus to classify the events as a "breach" would be invalid. This approach to value legality over morality quickly led to backlash so they pivoted to apologizing and promising to do better. Their initial mindset of "we did nothing wrong" shows that they were never prepared to effectively provide the care that users needed until backlash and criticism followed.

The changes that they introduced into their platform after the scandal did not fully introduce transparency to the privacy issues. They ineffectively informed users if their information was compromised, which shows they still are not committed to taking responsibility for their mistakes. The platform changes dealt more with changing the location of the privacy settings, but to "those who were unaware that they needed to change their privacy settings, they had yet to be informed." (Kozlowska, 2018). Their initial change, as discussed earlier, of third-party applications not being able to access user's friend information without their consent was grandfathered in, thus existing applications were not bound by this. The actions taken by Facebook to provide care were relatively ineffective in addressing the main issue of transparency and thus shows Facebook's did not take the correct actions to provide care.

Conclusion

Facebook's lack of prioritizing its users during the Cambridge Analytica scandal was unjust and immoral through the scope of care ethics. With the three steps for care as attentiveness, responsibility, and competence, Facebook was unable to comply with these critical ethical components which present a basis in providing care in relationships. Instead, they prioritized strengthening their relationship with advertisers at the user's expense. Their actions show that they were unable to provide the appropriate amount of care to its users which resulted in the Cambridge Analytica scandal. In redesigning their platform, they should allow for maximum transparency with its users so they can properly protect their information and have knowledge of the risks that come with using the platform. This would likely hinder their relationship with advertising agencies, but it is an appropriate approach that would save their reputation and rebuild trust with users.

References

Ertugan, A. (2017). Using statistical reasoning techniques to describe the relationship between Facebook advertising effectiveness and benefits gained. Procedia Computer Science, 120, 132–139. doi: 10.1016/j.procs.2017.11.220

Federal Trade Commission. (2019, July 24). FTC Imposes \$5 Billion Penalty and Sweeping New Privacy Restrictions on Facebook. Federal Trade Commission.

https://www.ftc.gov/news-events/news/press-releases/2019/07/ftc-imposes-5-billion-penalty-sweeping-new-privacy-restrictions-facebook

- Hu, M. (2020). Cambridge Analytica's black box. Big Data & Society, 7(2). https://doi.org/10.1177/2053951720938091
- Isaak, J., & Hanna, M. J. (2018). User Data Privacy: Facebook, Cambridge Analytica, and Privacy Protection IEEE Journals & Magazine. Ieee.org.

 https://ieeexplore.ieee.org/abstract/document/8436400
- Klaver, K., & Baart, A. (2011). Attentiveness in care: Towards a theoretical framework. Nursing Ethics, 18(5), 686–693.
- Kozlowska, I. G. A. (2018, Apr 30). Facebook and Data Privacy in the Age of Cambridge

 Analytica. Retrieved from https://jsis.washington.edu/news/facebook-data-privacy-agecambridge-analytica/
- Maio G. (2018) Fundamentals of an Ethics of Care. In: Krause F., Boldt J. (eds) Care in Healthcare. Palgrave Macmillan, Cham
- Meredith, S. (2018, April 10). Facebook-Cambridge Analytica: A timeline of the data hijacking scandal. Retrieved from https://www.cnbc.com/2018/04/10/facebook-cambridgeanalytica-a-timeline-of-the-data-hijacking-scandal.html
- Nichol, P. (2019). Rethinking Consent in the Age of Facebook and Cambridge Analytica.
- Nyoni, P., & Velempini, M. (2018). Privacy and user awareness on Facebook. South African Journal of Science, 114(5/6). https://doi.org/10.17159/sajs.2018/20170103 Operating Theatre Journal, (343), 3–3.
- Poel, van de, I. R., & Royakkers, L. M. M. (2011). Ethics, technology, and engineering: an introduction. Wiley-Blackwell.
 - http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&A N=510116

- Rehman, I. u. (2019). Facebook-Cambridge Analytica data harvesting: What you need to know.

 Library Philosophy and Practice, 1-11.
- Tronto, J. C., & Fisher, B. (1990). Toward a Feminist Theory of Caring. In E. Abel, & M. Nelson (Eds.), Circles of Care (pp. 36-54). SUNY Press.
- Tronto J. C. (1993). Moral boundaries: a political argument for an ethic of care. Routledge.