

Final Research Paper Assessment

*TOPIC: FORMER **UBER** EMPLOYEE SUES COMPANY, ALLEGING PRIVACY VIOLATION.*

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Introduction

This research paper serves as an overview of what I've learned during my spring semester in professional ethics class and its principles within my major and my future job as a software engineer. During the following lines I will identify my own ethical system, and the ethical system my profession uses, and to support it I will include the code of ethic of a software engineer.

Besides my understanding of professional ethics, in this paper, I will also elaborate on my capabilities of realizing and solving a problem when it comes to the professional ethics. The problem spotted on the approved article " Former Uber employee sues the company, alleging privacy violation" will be the case. I will not just provide a short summary of the case but also I will identify the primary issue, key players, and compare the article's ethical system with the ethical code used within my profession. Afterward, I will elaborate on the possible options to resolve the issues, and I will wrap my thought concluding the best option based on my ethical system.

Personal Ethical System

Before taking professional ethics course at North American University, I never thought about my personal ethical system neither I had much information about it. Through all my life I've been strict with myself and strict to others as well. Besides just being strict, I do pay a lot of attention to the punctuality and honesty. All these features of me helped me build a stronger character, a good moral and helped me to choose the good virtues of the ethic. At the end of the day, it is us who decide who and what do we become.

Thanks to this course and to the hard work of my instructor, I realized that I am leaning on the best part of the ethical system; I am a duty-driven person. Now that I've more information and more knowledge about being duty driven my daily life in my workplace and school has been a relief. I realized that I am not the worst case. People around me follow different ethical systems, and some of them, let their emotion to steer the wheel of their decisions. Seeing all this is making me more motivated to be a duty-driven person, work hard, stay honest, responsible, reliable and make clear rights and wrongs.

Ethical System Most Often Used in Computer Science and Software Engineering

As in many other jobs and professions, there are different ethical system used in computer science and software engineering. As software engineers, we should act in an ethical and morally responsible way if we are to be respected as professional engineers.

According to Miller, K “For computing professionals, such codes have been developed by ACM, the British Computer Society (BCS), the, IEEE-CS, the AITP, the Hong Kong Computer Society, the Systems Administrators Special Interest Group of USENEX (SAGE), and other associations”.

Software engineering involves wider responsibilities than simply the application of technical skills. The practicing software engineer engages in a social process during software production and thereby acquires obligations to users, clients, customers, colleagues, supervisors, the organization for which he works, and the discipline of software engineering. The ethical problems faced by the software engineer involve the end product, the process of developing that product, and the human interactions in the development of the product. “In contrast, moral responsibility tends to be shared: many engineers are responsible for the safety of the products that they design, not just a designated safety engineer”. (Miller, K)

Computer ethics, according to the mass media, seems to include every conceivable misuse of

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computers. In most situations where ethical problems arise, there is a variety of contributing factors from the lack of knowledge of the customer to the desire for unreasonable profits (Donald Gotterbarn). Ethical issues in the use of computers can also be evaluated through the use of analogies to more familiar situations. When making ethical decisions, software engineers cannot rely only on general moral reasoning but also on specific guidance from codes of ethics, such as the ACM Code of Ethics.

Furthermore, most of the time people are not aware of this ethical system within their jobs. Applying a code of ethics might not yield a clear solution of an ethical problem because different principles in a code might conflict. Other than these general commitments that each one share, software engineers have extra commitments that start from the duties of their expert work and their associations with clients, bosses, different experts, and people in general (Loui and Miller, 2008). Based on my personal observation and analysis of software engineers' behaviors at their working places and performing their professional duties, the most often used ethical system in computer science is a deontological ethical system. To come to this conclusion I want to thank major professors like Dr.Sonmez, Dr. Suslu and Dr. Aydin who have been in this profession for over 10 years who helped me with their opinions during our short interview about ethical system most often used in computer science and software engineering.

Code of Ethical Principles in Computer Science and Software Engineering

A code of ethical principles in software engineering I will be using during the development of this term paper is the one created by ACM (Association for Computing Machine). Before going ahead and talking about some of the principles, I would like to emphasize that I am part of the ACM organization membership and I've been following these principles for the last four years as a software engineering student and I also believe some of these principles will be very helpful in my future career. Software Engineers are submitting themselves to making the improvement, examination and upkeep of programming a useful and regarded calling. As per their dedication to the wellbeing, security, and welfare of people in general, programming engineers might stick to the accompanying the following eight principles:

1. PUBLIC - Software engineers shall act consistently with the public interest.
2. CLIENT AND EMPLOYER - Software engineers shall act in a manner that is in the best interests of their client and employer consistent with the public interest.
3. PRODUCT - Software engineers shall ensure that their products and related modifications

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- meet the highest professional standards possible.
4. JUDGMENT - Software engineers shall maintain integrity and independence in their professional judgment.
 5. MANAGEMENT - Software engineering managers and leaders shall subscribe to and promote an ethical approach to the management of software development and maintenance.
 6. PROFESSION - Software engineers shall advance the integrity and reputation of the profession consistent with the public interest.
 7. COLLEAGUES - Software engineers shall be fair to and supportive of their colleagues.
 8. SELF - Software engineers shall participate in lifelong learning regarding the practice of their profession and shall promote an ethical approach to the practice of the profession (“Association for Computing Machinery”, 2015).

“Former Uber employee sues company, alleging privacy violations – Article’s Summary

Spangenberg, an Uber employee who was hired by Uber as a forensic investigator files suit and say that Uber collect data from their entire customer and their employers. Spangenberg let his manager know that by doing so they were violating the government regulations regarding data protection and consumer privacy rights. Even though he talked to the manager when the government's control were going to Uber's offices they were locking down the offices and cutting off the connectivity.

The Primary Issue

The issues in this article are:

- Should Uber give access to all their employees to the private data, and
- Did Uber do the right thing by firing Spangenberg because he found that company was violating governmental regulations regarding data protection and customer's privacy right?

Key Players

- Uber-Company
- Spangenberg
- Uber managers
- Barbara Sigari
- Uber employees
- Governmental agencies
- Sophie Schmidt
- Attorney General Eric Schneiderman
- Clients

Comparing The Ethics Used in The Article With The One Used in The Computer Science

The ethic used in the article allowed Spangenberg to sue his company for their unethical work and letting all their employers to have access to the sensitive data. On Software engineering code of ethics and professional practice is clearly explained in principle 1: public, where it says that

Software engineers shall act consistently with the public interest. In particular, software engineers shall, as appropriate:(Software Engineering Code of Ethics, Version 3.0,” November 1997, pp. 88-92)

- Section 1.01. In the code of ethic says that software engineers should fully accept their responsibility for their own work.
- Section 1.03. Says that software engineers should approve software only if they have if they have a well-founded belief that it is safe, meets specifications, passes appropriate tests,

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and does not diminish quality of life, diminish privacy, or harm the environment. (Software Engineering Code of Ethics, Version 3.0,” November 1997, pp. 88-92)

- Section 3.05. Ensure that an appropriate method is used for any project on which they work or propose to work.(Software Engineering Code of Ethics, Version 3.0,” November 1997, pp. 88-92)

By looking these examples I took from the Software Engineering Code of Ethics we can easily tell that Spangenberg acted in an ethical way and he really applied his ethic on his job. Since Uber was collection private data about its consumer and violating their privacy, but also on the other hand they were lacking security on their work, Spangenberg could not continue doing that work because it seems against his code of ethic as an engineer. He could not do it because the method Uber was using wasn't appropriate and the purpose was not ethical. Uber company making their employers working on a such thing was clearly violating their code of ethics. Also, on the other hand, Spangenberg must have understood that Uber strategy was diminishing privacy. As I mention above in section 1.03 we as software engineers should approve a work if they are safe, not harmful and not diminishing privacy.

Given these points, we can clearly see that Spangenberg behavior was based on his code of ethics as a software engineer. He was not considering any outcome benefits, emotions, social status or anything else, but the facts of clear rights and wrongs.

Analyzing The Article

Spangenberg, a person who initialized file suit against Uber is a known forensic investigator who was hired in March 2015. In his claims, he states that he has reported to Uber higher-up that the company's lack of the security was resulting on Uber employees being able to have full access to track politicians, celebrities and even personal acquaintances. Spangenberg states in his declaration he told Uber managers that by allowing all its employees to access this information Uber was violating governmental regulations regarding data protection and consumer privacy rights. Spangenberg said he objected to Uber's practice of locking down its offices and cutting all connectivity when governmental agencies raided Uber's offices. Sophie Schmidt issued a lengthy statement against Spangenberg where he was saying that everything was untrue and that their employers have limited access to customer data. Despite the issues being raised regarding Uber's

management of customer and drivers data, the company appears likely to gain access to even more sensitive information in coming days.

Possible Alternatives

There are many different possible options that could be applied in order to prevent whole this event that was very crucial for the company's reputation. Based on my opinion and understanding of this article, possible alternatives could be:

1. Uber should have accepted the mistake and behave like they weren't aware of it and promote Spangenberg.
2. Spangenberg shouldn't have protested or done anything but just follow what he was asked to do.
3. Uber should have denied everything and fire Spangenberg for false accusation.
4. Spangenberg shouldn't fall back from suing the company.

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5. Fight back in the court with Spangenberg.
6. Uber could offer apologies to the clients.

Looking for the alternatives I've to admit that alternative 6 is not a quite good and smart way to cover that entire terrific mistake. Violation customer's privacy cannot be passed easily just with an apology. This should have been thought at the moment when they started this company and should have taken it seriously, and prevented what happened. Besides it, the other alternatives are feasible and likely to be done. However, there are pros and cons for each of them. The pros of the first alternative would be that Uber after promoting him slowly would be able to cover their mistakes and would have to make it seem like an incident. On the other hand, the cons of the fifth alternative would be that Spangenberg could win the case and it would possibly destroy Uber's reputation and it would lose its market.

Recommendations

My recommendation based on the research I've done while analyzing the article would be option

6- Uber should have accepted the mistake and behave like they weren't aware of it and promote Spangenberg. My recommendation is based on the engineer's code of ethics as mention earlier.

- **CLIENT AND EMPLOYER** - Software engineers shall act in a manner that is in the best interests of their client and employer consistent with the public interest.

- **MANAGEMENT** - Software engineering managers and leaders shall subscribe to and promote an ethical approach to the management of software development and maintenance.

As a matter of the fact, just by reading and having in our mind this two points, we could tell that just by accepting their mistake, behaving like they weren't aware of it and promoting Spangenberg Uber could easily get away from this situation. As a result, this tell us that Uber failed to have a better management of their employers and made them be the ones who are not being ethical and are violating their ethical principles

Identify The Best Option

From all the alternatives mentioned above, I would say that fourth option seems to be the most reasonable and the best option because it uses legal and ethical way to conclude the case. On top of it, this shows that Spangenberg is a duty-driven person and he is aware of his responsibilities as a software engineer. The way that Spangenberg reacted to the problem, first he went and told the manager that he realized a lacking of data, convinced me that he was a man who knew his ethical system and tried to solve this problem in an ethical way. In class, my instructor explained that sometimes we would face with a work that might be okay for the company but not okay for our ethical system. This is the same situation Spangenberg found himself in. At the end, I am choosing this option as the best one, based on the duty driven ethical system I am following. Separating clear rights and wrongs will make the whole process easier, save time and bring the right decisions.

Conclusion

To sum up this paper I would like to say that, I am very happy for taking this course. It helped me to understand how to use my profession in an ethical way and see things in another perspective. When it comes to the ethical system in my major as a software engineer, even though many software experts are duty driven there can be leaking in some cases as within the article I have analyzed. There will always be relativism-based individuals even though the whole system might be duty driven.

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