Data Privacy and Security: Ethics Behind Collecting Data, Using Data, Storing Data, Sharing Data, Securing Data, and How To Do These Things Ethically

Ethics in Information Technology: A Comparative Analysis

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Abstract— Many **"of us do not realize how exposed our lives are, or can be, my common data practices" [1]. Lots of things such as "reading and Internet search habits, political and religious views," [1] and "private conversations at home" [1] may "be stored somewhere unknown to you, often without your knowledge or informed consent" [1] within a "chaotic data ecosystem that gives individuals little to no ability to personally" [1] "delete, correct, or control the release of that information" [1].**

Keywords—data, ethics, using data, storing data, sharing data, securing data

I. Introduction

What are the ethics behind collecting data, using data, storing data, sharing data, securing data, and how should these things be approached ethically? "Unethical or ethically negligent data privacy practices, from poor data security and data hygiene, to unjustifiably intrusive data collection and data mining, to reckless selling of user data to third parties, can expose others to profound and unnecessary harms" [1]. Therefore, we must find out how to solve them through ethical philosophies. Information privacy is identical to data privacy. The scope and purpose of the paper is to determine the thinking behind many ethical philosophies from a data privacy perspective by analyzing case studies.

II. Background

Each ethical philosophy will be defined, and a general data privacy background will be defined.

A. Ethical Philosophies

a) Kantianism: Kantianism is a philosophy where if someone believes in it, they would ask theirself, "what's the maxim of my action," [11] or "what's the general rule that stands behind the particular action" [11] that they're considering [11]? This means with this philosophy, if someone believed it, they would have to consider general rules behind any action they plan on executing and follow those rules to determine if an action should be executed or not, so for example, lying or stealing should never be done regardless of the circumstance.

b) Ethical Egoism: Ethical egoism is a philosophy that "claims that it is always right to do what would benefit you the most," [10] so "it is morally good to do whatever will give the best outcome for you, not necessarily what you believe will give you the best outcome but will actually give the best outcome for you" [10]. This means with this philosophy, if someone believed it, they would aim to only care about doing things that would benefit theirself only.

c) Social Contract: Social contract, or contractarianism, is a philosophy that is bound by a "shared agreement" [9] promising "not to steal from each other," [9] to benefit both parties, like how one of the two parties may have "more security and a more interesting diet" [9] after making a "promise to trade, avocados for mangos" [9]. This means with this philosophy, if someone believed it, then another person would have also believed in it to reach compromises to benefit eachother in some form.

d) Act Utilitarianism: Utilitarianism is a philosophy that "focuses on the results, or consequences, of our actions, and treats intentions as irrelevant" [8]. Act utilitarianism is a philosophy saying "in any given situation, you should choose the action that produces the greatest good for the greatest number" [8]. This means with act utilitarianism, whoever believed in it would choose actions that have overall good results for the most people ignoring intentions.

e) Critical Cultural Relativism: Cultural relativism is "a pedagogical and sometimes political medium to challenge ethnocentric western views and cultural practices and to promote an appreciation of cultural diversity" [5]. This means that cultural relativism challenges the cultural practices of

cultures to promote cultural diversity appreciation. Critical cultural relativism critiques "cultural practices in terms of human rights" [6] suggesting "that practices should be evaluated in terms of how and why they are adopted" [7] . This means with critical cultural relativism, cultural practices should be checked focusing on only the how and why questions which could also be considered critiquing human rights.

B. Data Privacy Terms and Details

Some possible key terminologies is how a data privacy book is organized, mentioning these things: "the concept of data privacy, situating its underlying assumptions and challenges within a historical context; we then describe the framework and a systematic guide for the General Data Protection Regulations (GDPR) for individual businesses and organizations," [3] "the third area focuses on Facebook, its abuses of personal data, corrective actions, and compliance with GDPR," [3] where Facebook could be modified to target general companies.

C. Data Security Terms and Details

Some technical details I found would be "Data science techniques" [4] for "cyber security applications" [4] that "include intrusion detection, insider threat detection, and malware analysis," [4] though it is possible I would not try to grab the details on everything relating to that and mostly would focus on the "privacy-enhancing data science techniques" [4].

III. BODY

For Kantian's principle relating to web platform data privacy (so this part would be analysis), "The Kantian principle of respect for persons dictates that web platforms should be transparent with its users concerning its use of their data, allowing users to make informed choices when using a platform" [2].

I want to consider cultural relativism as data is stored for many people in society, want to consider egoism since it's possible some companies would not bother trying to consider data ethics unless they got some sort of benefit out of it, and want to consider Kantianism since moral laws can be created within companies. I also want to consider act utilitarianism as generally I believe companies like to disrespect user's data to benefit their profits, maybe how rule utilitarianism would not work briefly since stakeholders would not be happy possibly if some data privacy measures were implemented, and want to consider social contract where maybe data sharing can be done and other companies can be expected to follow the rules behind making the data private.

Privacy and data protection is disregarded by some companies for many reasons such as egoism or act utilitarianism to benefit the companies' profits more than maintain respect with it's userbase. It is ethically relevant because it is a common problem dealt with today which if companies consider ethics for, could become less of an issue.

An advantage of egoism is that companies could collaborate between each other to try to protect users data for some incentives, but there would usually only be incentives if the company is going downhill in reputation for data privacy, so one disadvantage of it would be companies disregarding data privacy if their reputation won't take much of a hit just to increase profits a little more. Act utilitarianism has the same exact idea as above in advantages and disadvantages. Social contracts have advantages of making sure that are clear rules on how data should be handled but also have disadvantages of the rules possibly being outdated at some points, especially from a cybersecurity perspective for cybersecurity policies. Kantianism has advantages of moral laws being the reason behind how data privacy can be respected but has disadvantages how those moral laws can forget some basic fundamental privacy rules to consider with no real set-in-stone policies to follow which ultimately can hurt privacy more if it is the only view of philosophy a cybersecurity engineer specializing in data privacy views. Cultural relativism is near identical to Kantianism and in terms of data privacy of users, are practically identical.

IV. CONCLUSION

What are the ethics behind collecting data, using data, storing data, sharing data, securing data, and how should these things be approached ethically? "Unethical or ethically negligent data privacy practices, from poor data security and data hygiene, to unjustifiably intrusive data collection and data mining, to reckless selling of user data to third parties, can expose others to profound and unnecessary harms," therefore, we must find out how to solve them through ethical philosophies. Some findings included finding out that philosophies like social contract, act utilitarianism, Kantianism, egoism, and cultural relativism alone are not enough for people in charge of data privacy to consider, and rather it is best for people in charge of data privacy to consider some sort of combination of these.

Some strengths of my arguments is that there are many companies that do bad things with data and that ethical philosophies could assist them away from doing those bad things, but some weaknesses are that the disadvantages can sometimes be unclear, that there may have been better points to consider, and more.

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