

Confidentiality or Cash: The Ethics of Using User Data for Advertising

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Introduction

A prevalent dilemma in Informatics, specifically within human-centered data science, is the use of user data for personalized ads. This dilemma is significant because it raises the issue of privacy vs. profit. There are three primary stakeholders involved in this dilemma: users, data-collecting online platforms, and advertising companies. Users are concerned about their data being leaked to third parties because they fear potential misuse or over-surveillance. They want to be able to use online platforms, like social media, to stay connected to trends and social norms without their usage data being tracked or shared. Online platforms want to make revenue to grow their infrastructure, often doing so by analyzing user data to offer targeted advertising opportunities to outside companies and to provide customized services and increase user engagement. Finally, advertisers want to target their ideal consumer group. In addition to profit, advertising companies are gaining data on the personal preferences of users, allowing them to better target consumers. The dilemma lies within the differing goals of these stakeholders: Is it ethical to share personal user data with advertising companies so that online platforms and companies paying for ads make more profit and increase user engagement?

Kantian Ethics

To analyze this dilemma, it is helpful first to consider Kantian ethics, which provides a framework for understanding moral duties and obligations, particularly concerning how individuals should be treated. Kantian ethics is based on the philosophies of Immanuel Kant and is a form of ethics dependent on the reasoning of actions rather than their consequences. It follows the general rule to “act only on the maxim through which you can at the same time will

that it be a universal law” (O’Neill, 1993, p. 108). This rule is known best as the Categorical Imperative, which urges individuals to follow rules that are established as universal laws, or ideas that society generally believes (O’Neill, 1993). It emphasizes the idea that the motivations of actions are what define them as morally just or unjust.

Within the context of data usage for personalized advertisements, online platforms may “utilize data to maximize their own welfare while sacrificing the welfare of users,” violating the Kantian notion that actions should not be guided by self-interest (Dobkin, 2018, p. 20). Dobkin states that online platforms are willing to sell out information as long as they receive some form of benefit in return, often in the form of profit from advertising companies that pay for data in order to provide personal advertising back to users. Since these online information fiduciaries are motivated by personal welfare rather than the welfare of their wide user base, Kantian ethics would define their actions as immoral. Although it can be argued that users are willingly giving up their information to these fiduciaries so the fiduciaries can use the data as they would like, many users want to maintain their privacy online but choose not to read through lists of terms and conditions and cookies, which are files that store information about a user’s browsing activity. This issue is known as the “privacy paradox,” wherein “users claim to value their privacy highly yet take little action to protect their personal data” (De Chaves, 2025, p. 2). Despite the online agreements of users, information fiduciaries such as online platforms that collect user data are aware that most users ‘accept cookies’ despite not reading through how their data is being processed, and as for those who do read it, the use of technological jargon reduces a user’s ability to comprehend these policies (De Chaves, 2025). In addition to this, many users simply do not understand how their data is being used. As outlined in the case study focusing on Facebook and Twitter’s Privacy Policy Statements (PPS), “56.04% of statements” from

Facebook's PPS "were flagged as vague" (Miller, et al., 2022, pp. 1-2). This ambiguity suggests that Facebook is not entirely transparent with its data usage, indicating that the users are not always at fault for failing to understand what agreements they make online. Although it can be argued that Facebook's data usage involves customizing users' feeds to best enhance their user experience, Kant suggests that one should always behave in a way that is universally applicable, meaning that one should respect the autonomy and dignity of others. The privacy paradox shows that people routinely violate their right to privacy for a variety of reasons, such as convenience; nevertheless, businesses are aware of this and fail to maintain full transparency with their users, continuing to exploit user data for financial gain and increased user engagement through personalized ads. An additional study states that apps that were more transparent to users about their exposure to third parties gave users "higher confidence in their choices," and left them more content with the application (Van Kleek et al., 2017, p. 10). This study's findings specifically indicate that placing user needs above company needs leads to greater satisfaction among the user base. This method would best align with Kantian ethics, as it places the needs of the majority (users) above the desires of the companies.

Ultimately, the Categorical Imperative suggests that since profit and user engagement are the primary motivators of online platforms rather than public well-being, these companies are in the wrong for selling user data, and instead, they should adopt policies of data usage transparency in language that is easy for users to understand. They should operate in a way that respects user autonomy in addition to following the law. From a user standpoint, users should make an effort to make well-informed decisions, and although this is complicated by the privacy paradox, Kantian ethics would advise users to act carefully and not just for convenience, knowing that their actions contribute to the establishment of social norms online. Similarly,

advertisers must avoid using data obtained in an unclear or immoral manner. Through the lens of Kantian ethics, advertisers should only use customer information obtained with explicit, voluntary consent and refrain from focusing on weaker people or changing their behavior in ways that compromise their autonomy.

Consequentialism

To further dissect this dilemma, we can consider the consequentialist standpoint. Consequentialism is an ethical theory focusing on the outcomes of actions. The most common form is “act-utilitarianism,” which focuses solely on the outcome of actions, not their intentions (Hooker, 2010, p. 1). For example, if an individual brings someone flowers as a gift, but the recipient is allergic to those flowers, the consequences of this gift are that the recipient becomes sick. Therefore, gifting the flowers was not an ethical action from a consequentialist standpoint. Consequentialism instead suggests that the correct action is the one that produces the best results. However, there are several debates within consequentialism to determine which point of view should be considered in determining whether or not the consequences were positive.

For instance, online platforms have grown significantly through revenue from personalized advertising, but traditional media forms, such as “publicly traded newspaper businesses in the U.S.,” faced a “42 percent” decline in market capitalizations within 2 years due to the rise of online media (Evans, 2009, p. 38). While the use of user data in digital media has led to significant benefits in terms of user engagement and profit, their actions have caused print media to lose business. The reduced revenue for newspapers raises ethical issues about the collective social effect of using user data. According to consequentialism, the growth of online sites in exchange for harm done to print media suggests that personalized advertising is immoral.

It can be difficult to grasp all the unintended consequences of complex actions, as seen in a study focused on the specific calculations of online advertising. The study states that “the net welfare benefit of adopting category-based advertising is positive if the value of additional ads received by consumers interested in the product category exceeds the nuisance cost incurred by consumers not interested in the category” (Johnson et al., 2024, p. 6). While more individualized ad targeting can increase consumer engagement and revenue, it can also have unintended consequences for other groups, much like the inconvenience faced by users uninterested in ads and the decline of traditional media. In addition to print media, users are also facing the consequences of personalized advertisements through charges to their data plan to download the additional ad-related kilobytes, a unit of digital information storage, necessary for personalized ads (Papadopoulos, 2018). In fact, “the median user paid an average cost of 0.0022 Euros per ad for advertising and analytics bytes, whereas the median advertiser paid 0.00071 Euros per ad” (Papadopoulos, 2018, p. 7). Users are being charged more than advertisers for the ads they view, and a consequentialist standpoint suggests that the harm being done to users makes personalized ads unethical. On the other hand, some users state that personalized ads are beneficial to them, stating “they know what I am interested in and show me such ads, I get to see offers that I might actually be interested in” (Strycharz et al., 2019, p. 7). Despite the decline of print media and the cost users pay, some users indicate that personalized advertisements provide them with real value. If the benefits outweigh the costs, personalized ads may be justified by the favorable consequences for certain users, such as greater convenience and enjoyment. However, since “there seems to be a general inability among users to infer the possible uses or effects of a piece of technology,” many users are unsure of how their data is being used and if it is being used safely (Marreiros et al., 2015, p. 11). Based on this lack of informed consent, consequentialism

suggests that, despite perceived benefits, users are not being made fully aware of how their data collection affects them, undermining the ethical justification for personalized advertising. In this case, the consequences outweigh the benefits, suggesting that as long as personalized ads produce harmful effects, they are considered ethically wrong.

Ethics of Care

An additional viewpoint to consider is the ethics of care. This ethical theory highlights the moral significance of connections and human interdependence while stressing the necessity of attending to the needs of those who rely on us (Held, 2005). It further emphasizes that “empathy is crucial to moral motivation” (Slote, 2007, p. 125). Ethics of care essentially requires a greater focus on the relations created and whether they are positive or negative. Given that everyone needs care at some time in their lives and that ethical decision-making must take into consideration the realities of vulnerability, reliance, and our obligations to one another, care is seen as both a practice and a moral ideal (Held, 2005). In the context of our dilemma, ethics of care places emphasis on the relationships created between our stakeholders, specifically, users, advertisers, and online platforms.

Ethics of care indicates that actions that misuse user data without taking into account the potential harm to relationships are unethical. For example, by using the pixels in posted photographs to connect a user’s camera to the user, Facebook's systems raise ethical concerns because they enable online platforms to correlate users across platforms, even anonymously (Li, 2020). Such invasive tracking reduces the trust between users and platforms, redirecting attention from caring for one another to control and exploitation. Ethics of care would suggest that if platforms must employ these technologies, it should be in a way that respects users' privacy and

builds relationships of trust rather than control. This concern of over-surveillance expands to a general user concern of data exploitation. As stated in one study, “we have also obtained the user profile information from social media...and used that information to monitor how those advertisements affect the user” (Imran et al., 2014, p. 5). Though intended to make advertisements more relevant, this investigation of users' behaviors by taking their data from other online platforms further suggests an exploitative relationship, rather than one of care. While users are willingly trusting online platforms, when these same platforms seek to investigate user behavior outside of the internet, it becomes a question of moral accountability. In terms of ethics of care, these sorts of interventions are wrong unless they are openly developed with the primary goal of improving user well-being, not tracking behavioral changes for gain. A proposal to avoid such an issue is to provide users with the option to choose if they would like to participate in the evaluation of advertisements (Ha et al., 2013). In this sense, users will feel valued to contribute back to online platforms while also receiving the choice of participation, reassuring them that their data will not be investigated without their consent.

Furthermore, online platforms must ensure not to enter a manipulative relationship with users, where users are unaware of how specific ads are affecting them. Users are affected by their online interactions, and correspondence between advertisement type and user motivation on social network sites affects their actions outside of the Internet (De Keyzer, 2015). Ethics of care would emphasize that ads should enrich their user experience without exploiting their actions in the real world. In a study conducted by Facebook, researchers changed the feeds of users in a psychological experiment, observing how they reacted (Kramer, 2015). By utilizing their platform to manipulate users, Facebook was criticized for their study (BBC News, 2014). From an ethics of care standpoint, such action is very problematic because it disregards the emotional

well-being and autonomy of the users. Rather than regarding users as lab rats, platforms should value transparency and consent and ensure that any intervention arises out of respect for one another and a will to act for users' authentic well-being.

Conclusion

In summation, each ethical framework provides a unique perspective for comprehending the obligations of stakeholders when negotiating the moral dilemma of managing user data for tailored ads. According to Kant, the misuse of user data without their free and informed agreement is immoral, and online platforms must behave out of a sense of obligation to preserve user autonomy rather than profit and increased engagement. Users should make responsible choices about their handling of data usage policies, and advertisers should strive to collect data only through ethical and transparent methods.

Consequentialism, on the other hand, evaluates these problems in terms of results, contrasting the advantages of increased profits and engagement against the disadvantages. Targeted advertising can cause privacy concerns, yet it can also improve customer experiences and spur economic growth. While online platforms could continue to focus on gaining the favor of advertising companies to grow their platforms, they risk losing users due to a lack of transparency. Consequentialism would indicate that the morality of using user data depends on whether or not the outcomes enhance the well-being of users. Since users are becoming more distrustful and paying hidden data costs, platforms should take active steps to minimize harm to their users by implementing transparent data policies. By prioritizing long-term trust over short-term profit, online platforms will be following the consequentialist goal of benefiting the majority.

Also, care ethics prioritize relationships and caring for vulnerable users. Through this theory, online platforms are expected to be responsive to the dependency users place on them, especially where the users may not necessarily know they are using their data. In concentrating on relationships, online platforms have a moral obligation to be compassionate and transparent, fostering environments where the users feel respected and protected. Manipulative behaviors such as emotional experimentation or invasive hyper-personalized advertising without the agreement of users breach this obligation by treating users as means to an end rather than ends in themselves to be cared for. Ethics of care encourages design and data practices that build trust, safeguard the emotional and psychological health of users, and preserve the integrity of the digital relationships created.

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