ETHICAL CONSIDERATIONS OF THE PROTECTION OF CONSUMER DATA IN THE UNITED STATES: PRIVACY IN THE INFORMATION AGE

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Introduction

The United States is a developed country that excels in the advancement of technology. People use technology with advanced capabilities in many aspects of daily life. When the smartphone first entered the United States' electronics market, it was very limited in its ability to share information with the outside world. However, in 2007, with the unveiling of the first iPhone, society drastically changed because the information-sharing capabilities of this device and its successors equaled that of a typical laptop. According to Kevin Jackson, the "iPhone's large touchscreen could flip through websites just like a desktop computer, all while looking sleeker than anything consumers had ever seen before." The smartphone is just one example but serves as a comprehendible gateway into the topic of consumer data privacy because it is close to the consumer's person at any given time. Other devices with access to wireless networks have similar capabilities. One capability often overlooked by the American public is the smartphone's ability to store and utilize private information. The private information saved, inputted, and spread by the smartphone presents a privacy risk to consumers in the United States. Since smartphone technology has only been prominent for the last fourteen years, American citizens do not always recognize the privacy implications of the smartphone because owning and operating one is a standard way of life in the digital age.

Data privacy is relevant because wireless "networks structure our world and contribute to redefining our culture." Here are some questions to consider introducing the topic of smartphone privacy: how might the fact that the smartphone has only been prominent since 2007 affect consumer knowledge about privacy concerns? How might informing society of the privacy

¹ Jackson, Kevin. "A Brief History of the Smartphone." Science Node. Accessed April 6, 2020. https://sciencenode.org/feature/How did smartphones evolve.php.

² Miguel Sicart. "Play in the Information Age." *Philosophy & Technology* 32, no. 3 (August 2018), 520.

risks associated with smartphones benefit the consumer as well as society? What concerns might consumers have about the privacy of their data? What reasons might the consumer have for not concerning himself/herself with who uses their private data? To whom does the responsibility to inform the consumers fall? What responsibilities do consumers have to conduct the necessary research on their own and learn how smartphones distribute data? Last, which school of ethics would make the most sense to help institutions create guidelines that benefit both the consumer and the American people? Privacy, personal data, and advanced technology can be complex areas of discussion. This project seeks to delve deeper into these questions and assess whether possible solutions to these issues exist with the help of virtue and deontological and utilitarian ethics. With the help of the Cambridge Analytica Scandal (a recent unethical consumer data breach), used as a central example, the three schools would likely all be excellent options depending on what the entity following the guidelines outlined by each of the schools seeks to achieve.

Literature Review

The pairing of modern technology and privacy is a recent development in the modern era. When the smartphone became an easy platform to provide consumers with accessible digital media, the concept of personal privacy quickly changed. According to Miguel Sicart, the smartphone is "a symbol of the Information Age." Its data collecting capabilities and other uses in most aspects of everyday living provide a convenient source of information to consumers. Furthermore, its everyday usage and accessibility has changed American culture. Privacy concerns associated with the collection of personal data will continue to be a major concern now and in the future because the information-gathering capabilities of electronic devices increase.

³ Sicart, 524.

⁴ Sicart, 524.

The internet of things "is the concept of basically connecting any device with an on and off switch to the Internet (and/or to each other). This includes everything from cellphones, coffee makers, washing machines, headphones, lamps, wearable devices and almost anything else you can think of." This term will be referred to as IoT for the remainder of the paper.

Jeroen van den Hoven points out in his article on personal data privacy that certain procedures, varying by culture, are present in societies to prevent the dissemination of personal data. Whether they be customs or laws, the procedures range from curtains and sealed envelopes to sunglasses and online passwords. The value of privacy varies depending on the viewpoint between parties and the moral justification for the right to privacy is not wholly agreed upon. Van den Hoven asserts the beginning of the twenty-first century presents three major arguments regarding data privacy. The first argument is that people should stop worrying about privacy because vast amounts of information are already easily accessible to others and it would be absurd to consider regulating such large amounts. The second argument considers the economic impact of trying to achieve higher levels of individual privacy in Western democracies. Since they are already struggling to afford the levels of privacy currently provided, it would be economically impractical to increase privacy levels. The third argument presented is that there are moral arguments that justify the prevention of others accessing personal data. Preventing institutions and individuals from harvesting private data for monetary gain as well as keeping "Big Brother"—a controlling entity exercising absolute control over society from George

⁵ Jacob Morgan, "A Simple Explanation of 'The Internet Of Things,'"

^{://}www.forbes.com/sites/jacobmorgan/2014/05/13/simple-explanation-internet-things-that-anyone-can-understand/?sh=669edb4b1d09.

⁶ Jeroen van den Hoven. "Information technology, privacy, and the protection of personal data." (Cambridge: Cambridge University Press, 2008), 301.

⁷ van den Hoven, "Information technology, privacy, and the protection of personal data," 302.

Orwell's novel 1984, from utilizing private information to control every aspect of citizens' lives are just a few examples.⁸

People need to understand how personal electronics (smartphones, laptops, smartwatches, iPads, etc.) connected to the IoT and access the user's information. Luciano Floridi, a wellknown philosophy professor at Oxford, developed the concept known as the Fourth Revolution. The Fourth Revolution is a new revolution that follows the Copernican, Darwinian, and Freudian revolutions. It is a revolution where people have realized human nature is intrinsically informational. Humans rely on information to process thought. They take in their surroundings finding information through their senses and developing ideas based on that thought. The first three revolutions were a result of utilizing the process of *finding* to understand the surrounding world. The Fourth Revolution, however, was a result of making devices such as technological machines and computers that produce thought for us. 10 One example is the smartphone that gives people information readily because of its continuous connection to some form of wireless connection. Continuous connections allow for fast processing times to retrieve the information desired by the user. It only takes a moment to question Apple's virtual assistant, Siri, and receive a response. However, if the iPhone is not connected to a network, Siri fails to answer questions. People require information to learn and gain knowledge of the world. They can accomplish this without giving away personal data. Details of the esoteric data-collecting technology connected to the IoT must be easily accessible and comprehensible to the American people so the public can remain informed.

⁸ van den Hoven, "Information technology, privacy, and the protection of personal data," 303.

⁹ Hilmi Demir. "The Fourth Revolution: Philosophical Foundations and Technological Implications," *Knowledge, Technology & Policy* 23, no. 1-2 (2010), 3.

¹⁰ Demir, 5.

Most humans naturally value privacy or at least some control over the protection of their private aspects of life. This is because "privacy is an enabling condition for intimacy." This intimacy is found in people's relationships with others in their lives. In the digital age, it is often in the form of data on personal devices. The consumer's digital footprint must remain protected from unauthorized use. As communication technology increases, user-control over personal privacy is decreasing because data is collected by institutions is now at such a massive level it is hard to control or regulate. Institutions use databases to store and collect private data without the user's informed consent. Agencies and corporations have the "technical capabilities to collect, store and search large quantities of data concerning telephone conversations, internet searches and electronic payment." With this in mind, the topic given much attention today is the meaning of private data and the value it has. If entities want it, it must give them something of use and hold value.

Constitutional and informational privacy are the two types of privacy commonly considered. Constitutional privacy is the freedom to make decisions without interference in personal matters. Informational privacy is the interest of an individual to control where their personal information spreads. These privacy concerns center on newer technology, especially those concerning smartphone technology. This is important because there are many ways in which smartphone devices can interact with the outside world as well as store your private information that comes in the form of notes, photos, passwords, voicemail, and email. More examples of personal data that a smartphone is capable of storing are "a person's date of birth,

¹¹ Jean L Cohen, "The Necessity of Privacy," Social Research 68, no. 1 (Spring 2001), 320.

¹² Jeroen van den Hoven, Blaauw Martijn, Pieters Wolter, and Warnier Martijn. "Privacy and Information Technology." Stanford Encyclopedia of Philosophy (Stanford University, October 30, 2019) https://plato.stanford.edu/entries/it-privacy/.

sexual preference, whereabouts, religion" and behavioral characteristics from social media. ¹³
Keeping this information private has moral reasoning. Personal information kept private can help prevent harm, informational inequality, informational injustice and discrimination, and encroachment on moral autonomy and human dignity. A problem with data regulation is that there is a possibility that some smartphone users do not value their privacy. They exchange information for convenience. It might be that they either exchange this information with consent or because they have received no instruction on how to better protect their private information.

Humans are social beings that need communication. Specifically, the communication of the smartphone's capabilities between culpable institutions and consumers. If a certain corporation were utilizing private information from individuals that compromised their privacy, it would infuriate many people. Video surveillance, phone calls, text messages, and internet search histories among others, if gathered without consent or cause, illustrate the specific data collection citizens may or may not support. The communication between institutions and the smartphone user needs to be as clear as possible. As Carole L. Jurkiewicz states: "Humans, being fundamentally social beings, will gravitate to systems that facilitate communication, and thus need to be educated about how and when their data are being sourced, with accessible and responsive authorities to whom they can report violations." The issue of unregulated data collection is a threat to the United States' social and political systems. The threat could attack "our psychological, emotional, and physical health; financial and educational systems; economic welfare; social civilities; and individual identity." Informing the consumer of the information-

¹³ van den Hoven, et al. "Privacy and Information Technology." plato.stanford.edu/entries/it-privacy/.

¹⁴ Carole L. Jurkiewicz. "Big Data, Big Concerns: Ethics in the Digital Age." *Public Integrity* 20, no. sup1

<sup>(2018), 53.

&</sup>lt;sup>15</sup> Jurkiewicz, 54.

gathering capabilities of personal devices and developing an ethical structure for privacy guidelines is essential to maintain American society.

Institutions can use virtue ethics to determine best practices and procedures related to data collection from consumers. It is an excellent set of guidelines aimed at improving one's character by living virtuously and reflecting on whether an action taken is what one ought to do when compared with the mean of that virtue. The mean is an idea initiated by Aristotle in his Nichomachean Ethics. Every virtue contains this mean that is the middle ground between too much and too little. 16 If there is too little of an action, that action is in a state of deficiency and must move towards the mean so that the action becomes virtuous. Conversely, if there is too much of an action, the action is in excess and must be brought back to the mean of the virtue. Since excess and deficiency lie on the outer bounds of the mean, they are to be considered vices. Aristotle points out that when giving and taking money, the mean is generosity, the excess is extravagance, and the deficiency is stinginess. ¹⁷ His example is this: "an extravagant man exceeds in spending and is deficient in taking, while a stingy man exceeds in taking and is deficient in spending." The concept of living virtuously within the mean can be applied to institutions creating ways to inform consumers about data collection practices. Furthermore, the institutions collecting data from personal devices can ensure that they are virtuously collecting data by following the mean of the virtue(s) applied to a given situation.

According to Aristotle, there are two kinds of virtue, moral and intellectual.¹⁹ The main difference in the origin of the two is how one goes about acquiring them. Intellectual virtue

¹⁶ Richard Kraut, "Aristotle's Ethics", The Stanford Encyclopedia of Philosophy (Summer 2018 Edition), Edward N. Zalta (ed.), https://plato.stanford.edu/archives/sum2018/entries/aristotle-ethics/.

¹⁷ Aristotle, Nichomachean Ethics, trans. Martin Ostwald (Indianapolis, Indiana: Bobbs-Merrill, 1962), 45.

¹⁸ Aristotle, (Bekker 1107b), 45.

¹⁹ Aristotle, (Bekker 1103a), 33.

develops through teaching and instruction, while moral virtue develops through habit. An institution can act as a person since they have a set of principles and beliefs that all persons in that institution generally share. Therefore, virtue ethics can be applied to an institution as a whole as if it was one autonomous being. After all, the "U.S. Supreme Court decisions that have extended to corporations many of the personal rights guaranteed to individuals under the U.S. Constitution, culminating in the ruling in Citizens United v. Federal Election Commission (130) S. Ct. 876 [2010])"²⁰ guarantee that they can act as one autonomous being. For an institution to maintain virtuous practices, it must maintain the mean of those practices, especially by habituation. For example, if an institution found it virtuous to disclose to the consumer what data they extract from smartphones over a month-long period, only to go back to hiding their data collection practices the next month and continuing this monthly cycle, one would find that the institution was not maintaining a virtuous way of operation through good habits. The idea of habituation is useful to the application of ethics in the collection of consumer data as well as the disclosure of what information is taken from them that potentially undermines the consumer's right to privacy.

In addition to virtue ethics, deontological ethics can also help institutions determine ethical data collection practices. In *Groundworks of the Metaphysics of Morals* Immanuel Kant discusses his views on the ethics of morals and their role in rational beings' lives. Much of his writing discusses an individual's duty towards himself/herself and others. However, not everything a person does is out of a sense of duty. It can be for selfish reasons or "inclinations" as well. An example Kant gives is that of an honest tradesman. An honest tradesman does not overcharge inexperienced buyers so that buyers from all experience levels can purchase goods

²⁰ Ira Bashkow, "Afterword: What Kind of a Person Is the Corporation?" PoLAR: Political & Legal Anthropology Review 37, no. 2 (November 2014), 301.

honestly.²¹ At first glance, the tradesman is performing his duty to consumers by honestly serving customers, but Kant points out that he only does so since "his own advantage required it"²² because it is in his best interests to remain an honest seller. Thus, the tradesman acted out of duty to preserve his own life through honest sales and out of an inclination to serve his customers justly.

The maxim is "a rule that connects an action to the reasons for the action." The key to living an ethical life is to follow a set of universal maxims that satisfies Kant's Categorical Imperative. The Categorical Imperative is an important Kantian idea understood as willing that the maxims one follows become a universal law as well as passing a test for universality. The test for universality is the reflective process of asking oneself whether his/her action can become a universal law. If any contradiction is found when assessing the universality of an action, the action's maxim does not satisfy the Categorical Imperative. For example, if a person states: "I ought to lie to save myself from jail time," the person's maxim fails the universality test because it suggests lying is universally acceptable and it is allowable for all persons to lie to others. The idea of universality can be summed as persons should treat others as they desire to be treated in return. The treatment of smartphone-using consumers by institutions collecting data from personal devices is an important scenario in which the categorical imperative applies to universal privacy guidelines across the United States.

The rationality of something, according to Kant, allows one to classify objects in nature as persons or things. An example of an irrational object or "thing" is a coffee mug. The mug is

²¹ Immanuel Kant, Groundwork of the Metaphysics of Morals, trans. Thomas Kingsmill Abbott, 18.

²² Kant, 18

²³ "Dr. Chuck's Nuts And Bolts of Determining the Moral Status of an Action." Accessed October 16, 2020. https://web.csulb.edu/~cwallis/160/questions/kant.html.

²⁴ Kant, 25.

²⁵ Kant, 47.

used daily to fulfill caffeine cravings. While solely used as a means for fulfilling a craving, it is acceptable to use it with no thought as to whether that mug was used as an end in itself. For, as Kant points out, only a "rational nature exists as an end in itself." These rational beings are considered persons. Once considered a person, that being cannot be used as a means to accomplish something without proper ethical guidelines. For example, when institutions utilize consumer data without informed consent, they are treating people as mere means. To avoid undermining the consumer's autonomy, institutions must use every method to ensure that consumers realize to what extent their data is being used. Immanuel Kant would agree with this argument because a person's autonomy "is the basis of the dignity of human and of every rational nature." As can be seen, institutions must consider ethical data collection practices that agree with deontology and Kant's writings because doing so will help them consider consumers as people, not objects.

Lastly, utilitarian ethics provides a helpful insight into the privacy issues consumers face from institutions and big data companies. The primary author referenced is John Stuart Mill and his book *Utilitarianism*. Utilitarianism is a theory where people choose actions that produce the most happiness out of all available options while taking into account both the short and long-term consequences. This theory is useful because it applies to society at large. In other words, it can guide the construction of societal guidelines and regulations concerning consumer data privacy. A question that a utilitarian might ask is this: "How will my action produce the greatest amount of happiness for others if I choose to perform said action?" Mill's utilitarianism maximizes the well-being of others and minimizes suffering. After all, it is a human desire to

²⁶ Kant, 55.

²⁷ Kant, 63.

²⁸ John Stuart Mill, *Utilitarianism*, ed. George Sher (Indianapolis, Indiana: Hackett Pub, 2001), vii.

²⁹ Mill, xiii.

increase pleasure and avoid pain.³⁰ The idea of applying utilitarianism to the issue of data privacy is to enhance American society through the institutional use of utilitarian ethics to guide consumer data collection and privacy effectively on a large-scale basis.

Another key to understanding utilitarian ethics is the concept of sacrifice. Mill's idea that "a sacrifice which does not increase or tend to increase the sum total of happiness" is a wasted one. When willing the greater good of society a person might need to make personal sacrifices that enhance the overall good while sacrificing personal happiness. However, anything less than a success in the endeavor is a wasted cause because it did not contribute to the overall happiness of society. In short, Mill wants people to ensure that a personal sacrifice will have a positive impact on the greater good before sacrificing personal happiness needlessly. In the *Editor's Introduction* to John Stuart Mill's *Utilitarianism*, George Sher points out that there are three things to consider for maximizing the overall happiness in any particular situation. He states that one must consider "(1) which people, present and future, will be affected by each of the actions we might perform; (2) what the effects of each possible action are likely to be on each of them; and (3) how happy or unhappy each individual will be made by each of these effects." All three of these considerations bring important questions into consideration when discussing the misuse of consumer data privacy.

To Mill, the most important aspect of following ethical guidelines is to follow guidelines that protect the dignity of the human person. He makes it clear that "moral rules which forbid mankind to hurt one another...are more vital to human well-being than any maxims." Therefore, when considering the American public under Mill's utilitarian lens it is necessary to

³⁰ Mill, 7.

³¹ Mill, 17.

³² Mill, ix.

³³ Mill, 59.

protect citizen's privacy because infringing on their privacy through improper data use can and does hurt them because a digital footprint is very much a part of the modern person in this digital age. Mill is a *rule* utilitarian. A rule utilitarian evaluates rules and then evaluates individual actions to see if they obey or disobey the utilitarian-approved rules. The benefit of using this method is that it is easier to apply to ethical guidelines, especially those that are utilitarian by nature. Finally, similar to Aristotle's idea of habituating a virtue to improve character, Mill states "habit is the only thing which imparts certainty." Through habits of better protecting consumer privacy, citizens of the United States will become more comfortable with current advances in technology.

Methodology

This research uses both textual and document analysis to make responsible decisions on the likely interpretations of the materials to come to a reasonable conclusion. A text is "something that we make meaning from." In other words, whenever a person interprets a book, film, privacy policy, court document, or T-shirt, it is possible to make a responsible conclusion based on evidence found by research. Texts are the "only empirical evidence we have of how people make sense of the world." To interpret texts this project will emphasize a structuralist approach. The structuralist approach to analyzing texts views arguments as having different interpretations yet containing common underlying structures that unite them. In other words, no single argument may be perfect but one argument might stand out as the most advantageous

³⁴ Stephen Nathanson, "Act and Rule Utilitarianism," Internet Encyclopedia of Philosophy, https://iep.utm.edu/util-a-r/.

³⁵ Mill, 41.

³⁶ Alan McKee, *Textual Analysis: A Beginner's Guide* (SAGE Publications, 2003), 10.

³⁷ McKee, 10.

³⁸ McKee, 18.

depending on the particular audience.³⁹ Furthermore, along with a structuralist approach to the information collection, the data used for this project is qualitative, not quantitative. The texts gathered and the documents analyzed will provide descriptions and conceptualizations of the arguments for the data collecting capabilities of personal devices and the ethical guidelines created through the schools of ethics. This is different from creating surveys and analyzing the data collected statistically. Finally, it is important to understand that "no text is the only accurate, true, unbiased, realistic representation...there are always alternative representations that are equally accurate, true, unbiased, and realistic." People write and interpret texts differently so no single text is ever enough for an accurate interpretation of a given topic.

Argument

Increasing people's knowledge and awareness of the data spreading capabilities of personal electronic devices can benefit all American citizens. If fewer people have their private information compromised, new technology would be less threatening to users and could continue to provide the beneficial resources that make it so prominent. Furthermore, the consideration of using the schools of virtue and deontological and utilitarian ethics to provide a set of universal guidelines to regulate private data collection would be an ideal solution to handling the privacy issues associated with data collection. Currently, the United States is having trouble regulating data because so many entities including the government collect data on such a large scale.⁴¹

The consumer response to new technology naturally plays a role in the societal privacy concerns associated with personal electronic devices. It is hard for people to respond to technology they do not understand whether that be because they do not care to learn, those

³⁹ McKee, 14.

⁴⁰ McKee, 28.

⁴¹ van den Hoven, et al. "Privacy and Information Technology." plato.stanford.edu/entries/it-privacy/.

responsible have not communicated the necessary information to them, they are oblivious to the privacy concerns, or a combination of the three. Many consumers who hear about security breaches via the news or other sources respond to the collection of private data negatively. An article written by Ruth Simon and Carla Freid, titled "Stop Them from Selling Your Financial Secrets," emphasizes the concerns raised by consumers about personal data collection:

Americans have been defrauded out of hundreds of millions of dollars by telemarketers who use personal financial data to identify people vulnerable to pitches for what turn out to be phony credit cards, loans or contest prizes. William Bennett, 61, a retired Army officer in Mount Morris, Mich., says that he received more than a dozen misleading credit-card and contest prize offers after telemarketers purchased his name, address and the fact that he was rejected for a Citibank Visa. 42

Stories such as these have caused considerable controversy over the years and they are not without warrant because the privacy paradoxes frequently present in technology often leave consumers feeling powerless in the attempt to control their private data. Many personal devices are capable of collecting and distributing much of the data that was used in the example above with William Bennet and telemarketers, leading to a common privacy paradox. The paradox is that the consumer often faces ambiguous trade-offs between the services and benefits of personal devices and their ever-present data collection capabilities.⁴³ If this is the paradox faced by most consumers, then it is understandable why they are generally negative towards private data

⁴² Ruth Simon and Carla Fried. "Stop Them from Selling Your Financial Secrets." *Money* 21, no. 3 (March 1992): 98, Accession number: 9205183298.

⁴³ Patricia Norberg, et al. "The Privacy Paradox: Personal Information Disclosure Intentions Versus Behaviors." *The Journal of Consumer Affairs* 41, no. 1 (Summer, 2007), 100-101.

collection and the amount of control they have over it. Again, people enjoy control over their private information and that includes who has access to it and what they are using it for.⁴⁴

Presently, many institutions collect and use the data retrieved from personal electronics. The issue presented by this collection of data is that consumers are not always aware of what data is being shared with third-party institutions. Of course, this presents ethical issues concerning data collection and the consumer's natural right to privacy. Currently, many institutions make it difficult for consumers to understand who has access to their data, what those with access are using it for, when the data is collected, where the information is saved, why they need access to private data, and how the data is being accessed by devices. If a consumer is capable of determining what data is valuable to them and how to control said data, it is an institution's responsibility to respect the consumers as autonomous persons.⁴⁵ To achieve this goal, institutions can use virtue and deontological and utilitarian ethics to inform consumers about the implementation of data collected from consumer's personal devices.

Virtue Ethics

As outlined above, according to Aristotle, virtue comes from either learning or habituation; it is not something that comes naturally. Institutions that improperly use consumer data are not virtuous because they destroy the consumer's autonomy concerning personal data. *Autonomy* in this context is defined as the ability of an individual to control their data and if an institution utilizes that data without the individual's consent it is an illegitimate use thus undermining the individual's autonomy or ability to make decisions on his/her own. Because

⁴⁴ van den Hoven, et al. "Privacy and Information Technology." plato.stanford.edu/entries/it-privacy/.

⁴⁵ Alan Rubel. "Privacy, Ethics, and Institutional Research." *New Directions for Institutional Research*, no. 183 (September 2019): 7, doi: 10.1002/ir.20308.

⁴⁶ Aristotle, (Bekker 1103a), 33.

⁴⁷ Sarah Buss and Andrea Westlund, "Personal Autonomy", The Stanford Encyclopedia of Philosophy, Spring 2018 Edition, https://plato.stanford.edu/archives/spr2018/entries/personal-autonomy/.

the realm of data collection and regulation is relatively new, institutions have not been properly instructed in the virtue of prudence and applying it to the collection and use of smartphone data. If these institutions were to engage in virtuous practices that respect the consumer's privacy, institutions would improve the happiness of their consumers, leading to a better relationship between the two. To ensure that this process of data transparency between institutions and consumers remains virtuous, it is necessary to find a median by which the institution does not fall into one of the two vices excess and deficiency. The average consumer does not need to know everything about the operation of data collection as it is complex. However, hiding important information does not give the consumer enough control over personal data. "That is why it is a hard task to be good," Aristotle states. It is not easy to find a median ground between too much and too little.

There are various considerations, which, by informing society of the risks associated with personal data and their smartphones, become significantly helpful. People become more aware of how a smartphone's data is being used by learning either on their own or through a course on personal data security. Equipped with the knowledge of how their smartphone uses private information, people become more confident in handling their data, especially in instances where the phone stores data and distributes it to others.

One possible practice an institution might implement is to train consumers to better control what information is allowed to be used by the institution. Just as Aristotle argues that legislators want to make their citizens good through training, institutions can train the consumer on better data protection practices raising the awareness of how smartphones collect data.⁴⁹ In an article written by Andrew Chaikivsky for *Consumer Reports*, the idea of a privacy workshop

⁴⁸ Aristotle, (Bekker 1109a), 50.

⁴⁹ Aristotle, (Bekker 1103b), 34.

held for anyone interested is introduced. The workshops, known as "crypto parties," are intended to inform consumers about better data protection practices. ⁵⁰ Unfortunately, it is not the institutions responsible for protecting privacy but concerned individuals endorsing these events. The reasons behind institutions' not concerning themselves with helping consumers protect smartphone data must be investigated. Institutions may have other commitments such as paid contracts with advertisers and marketers to collect data. Therefore, if the institutions endorse consumer privacy education, those that buy smartphone data might have a negative reaction. If this is indeed the issue, institutions must rethink their commitments to protect consumer privacy and give control back to the consumer. Therefore, to regain consumer trust it would be helpful for consumers to see institutions acting in a virtuous manner with data protection programs, data opt-out programs, and transparent data collection practices.

It is the responsibility of the institutions creating smartphone technology to inform consumers of their devices' capabilities. Uninformed consumers have a right to privacy and, keeping smartphone data collection practices a secret is lying to them. Alan Rubel emphasizes that deception is morally wrong because it undermines a person's ability to reason and make decisions autonomously.⁵¹ Additionally, Aristotle speaks of the virtue of truthfulness, which complements Rubel's understanding of deception. To summarize his points, Aristotle infers that a truly honest man is not honest because he is forced to be honest; rather, he is honest because it is engrained in his character.⁵² Aristotle's virtue ethics although written with the individual in mind can be applied to institutions as a whole. To restate a previously mentioned concept, if an

⁵⁰ Andrew Chaikivsky, "Security Pros, Librarians Holding Digital Privacy Clinics across U.S.," Consumer Reports, Consumer Reports, June 28, 2017, https://www.consumerreports.org/privacy/security-pros-and-librarians-holding-digital-privacy-clinics/.

⁵¹ Rubel. "Privacy, Ethics, and Institutional Research," 8.

⁵² Aristotle, (Bekker 1127b), 105.

institution has a record of deceiving consumers then that institution must change its procedures accordingly to regain a virtuous set of practices and consumer trust.

An issue faced today is that consumers fear their privacy is not taken seriously, especially after massive data breaches occur. For example, in 2013 Target experienced a cyber-attack that affected 41 million credit cards. The result of this breach led to an 18.5 million dollar settlement along with more secure data handling practices.⁵³ If making changes to data handling practices was not part of the settlement, Target would not have made changes to better protect consumer privacy. Consumers do not know how to hold large institutions accountable because they feel they cannot control what information institutions collect.⁵⁴ The virtuous practices Aristotle speaks of in his writings can be applied to institutions as a whole as opposed to individual persons exclusively. He states, "A man who pretends to greater qualities than he possesses with no ulterior motive is a vile sort of person...if his motive is money or something that will get him money, he shows a greater lack of propriety."55 For-profit institutions are regularly the ones utilizing private data to sell products. In the realm of smartphones, the institutions collecting data normally sell data to advertisers for targeted ads towards individual consumers. Moreover, as Aristotle points out, where money is involved, people must exercise greater virtue because it is a greater offense to lie to someone for the sake of money. Therefore, there must be transparency as to where consumer data is distributed if sold to other institutions even if the consumer permits the use of their information.

⁵³ Kevin McCoy, "Target to pay \$18.5M for 2013 data breach that affected 41 million consumers," USA TODAY, USA TODAY, May 23, 2017, https://www.usatoday.com/story/money/2017/05/23/target-pay-185m-2013-data-breach-affected-consumers/102063932/.

⁵⁴ Rubel. "Privacy, Ethics, and Institutional Research," 13.

⁵⁵ Aristotle, (Bekker 1127b), 106.

Deontological Ethics

As described earlier, the Categorical Imperative in Kant's Groundwork of the Metaphysics of Morals is important because it is a set of rules or maxims a rational being follows willing that it become a universal law if applied in the correct situation and with the right intent.⁵⁶ An institution can use this idea to develop a set of rules that can help them ethically determine whether some part of their current data collection practices would be accepted universally. A problem in the smartphone application (App) industry is that the privacy policies consumers agree to are oftentimes lengthy and inscrutable.⁵⁷ For example, if an institution was to find that generally, it attempts to prevent smartphone users from reading privacy agreements by using legal and ambiguous terms, it might use deontology to assess what maxim would fulfill the requirements of making it a universal law that fulfills their duty towards consumers. Once an institution changes its rules to only those that fulfill a universal law, eventually society will be able to tell a posteriori (with observational knowledge) that the institution must be an ethical, even virtuous, institution because they follow universally acceptable maxims. Since some institutions use consumer data without clear consent, this compels them to have a duty towards the consumer to protect their private data as well as inform them that they are collecting the data for whatever the purpose might be.

Institutions are not the only ones with a duty towards others. It is also the responsibility of the consumer to inform himself or herself as much as possible how their smartphone's privacy settings and permissions work. Both institutions and consumers must work together to create an ethical society. Olya Kudina and Peter-Paul Verbeek suggest "if ethics is about the question of

⁵⁶ Kant, 46.

⁵⁷ Kenneth A Bamberger, et al, "Can You Pay for Privacy? Consumer Expectations and the Behavior of Free and Paid Apps," (Berkeley Technology Law Journal, 2020), 356.

'how to act' and 'how to live,' and technologies help to shape our actions and the ways we live our lives, then technologies are 'actively' taking part in ethics." Therefore, people must use their smartphones responsibly and learn more about them, in turn, helping others to live ethically as well. For example, if a consumer only allows a smartphone to access a few less-important pieces of information about them, the institutions collecting the data will be hard-pressed to obtain the consumer's private information. The consumer has a duty to others not to provide a temptation for people to gain unauthorized access to private data on their smartphone. For this reason, Kant insists, "to whatever laws any rational being may be subject, he being an end in himself must be able to regard himself as also legislating universally in respect of these same laws." Through the realization that smartphones actively change their lifestyles and can make an impact on others, consumers can better educate themselves on creating a private digital footprint by considering deontological guidelines.

Another deontological idea that Kant discusses is the rationality of humankind and how being rational imparts a duty to treating others as an end in themselves instead of an object used to fulfill a purpose. Smartphone data collection does not happen merely out of chance or for fun. Usually, an institution wants something from that data. Institutions sell and manipulate data to help other institutions perform specializations such as advertising and learning about people's habits through browsing and search histories. Treating consumers solely as a means to another purpose by using their private data destroys their right to privacy and prevents them from acting autonomously. Kant points out "it is clear that he who transgresses the rights of men intends to use the person of others merely as a means." Consequently, deontology calls for institutions to

⁵⁸ Olya Kudina and Peter-Paul Verbeek, "Ethics from Within: Google Glass, the Collingridge Dilemma, and the Mediated Value of Privacy," (*Science, Technology & Human Values*, 2019), 297.

⁵⁹ Kant, 65.

⁶⁰ Kant, 56.

treat consumers as ends in themselves. To do this, institutions must properly inform all consumers how they are collecting and using smartphone data. Furthermore, institutions must respect consumer privacy. It should be the consumer's choice to decide if institutions have a right to access his/her smartphone data. If consumers give an institution consent to use their data, then they are no longer being used as a means because the consumers have full knowledge that the institution has permission to use it.

The school of deontological ethics calls for institutions to protect the consumer's privacy and autonomy as a rational being by not using his/her private information as a means but as ends in themselves. It promotes clarity in how an institution collects data from consumers' smartphones and how they use the data. Furthermore, it calls for consumers to educate themselves about their smartphones' potential privacy-compromising features so that they do not make themselves easy targets for institutions looking for data. Deontology does not work well as a standalone guideline for ethical data collection because it is too pure and fails to consider important factors such as the context and emotion surrounding a person's actions. For example, if a person told a lie to save another's life, deontology only considers that the lie is a contradiction to universal law no matter the circumstance. Thus, the person is morally wrong to lie because it breaks the deontological universality theory. With this in mind, it would be more helpful to incorporate other schools of ethics alongside deontology to supplement and balance its main ideas. Deontology calls for institutions to follow an ethical set of universal data collection practices that they can use along with other schools of ethics to better protect consumer privacy. In turn, the human right to privacy will remain consistent in the ethical and considerate manner consumers seek.

Utilitarian Ethics

At the core of John Stuart Mill's theory of utilitarianism is the desire to promote happiness and prevent pain. With this in mind, it is easy to acquiesce that the average consumer would benefit from this theory. Pain can be anything from physical injury to emotional strain. While big data companies do not necessarily inflict physical pain on consumers, the emotional strain is present and contributes to the unrest of modern society. As aforementioned, Carole Jurkiewicz emphasizes that big data is a threat to the "psychological, emotional, and physical health" of consumers in the United States. When security breaches occur and information such as credit card numbers and social security numbers become compromised, the security breaches and compromised information immediately put a strain on the hundreds of thousands of consumers affected. As a result, a utilitarian perspective on consumer privacy breaches can mend practices that lead to privacy breaches and ideally the ones hidden from the consumer.

Utilitarian ethics calls for sacrifice when necessary to promote the greater good. The sacrifice is not itself good, but if it helps promote universal happiness across the United States, it has not a wasted cause. The sacrifice utilitarian ethics calls for is for big data companies to end the collection of personal consumer data for unauthorized use. Mary Culnan and Robert Bies write In a world where organizations can no longer know their customers personally, advances in technology combined with a need to serve customers as individuals have fueled the collection of personal information. If sacrifice must happen to promote the greater good of society and overall happiness, first, big data companies must recognize how they can help, and second, the rest of society can then follow. This is because the ultimate entity responsible for creating change

⁶¹ Jurkiewicz, 54.

⁶² Mill, 17.

⁶³ Mary J. Culnan and Robert J. Bies, "Consumer Privacy: Balancing Economic and Justice Considerations," *Journal of Social Issues* 59, no. 2 (July 2003), 324.

is the institution(s) that run specific programs that undermine consumer privacy across the country. Yes, the government can play a role in regulation and investigation, but the role is only to be a spokesperson for the citizens of the United States. Sacrifice and change must start at the heart of the problem (misuse of consumer data by big data companies) and then work itself outward. Mill states "the happiness which forms the utilitarian standard of what is right in conduct is not the agent's own happiness but that of all concerned."⁶⁴ The American people, as a whole, would benefit from Mill's ideas if all, especially big data companies, chose to follow the ideas.

Most consumers have a digital footprint or identity. It is a second person that contains everything about them—from personal information to internet browsing habits—any way the person uses digital media on electronic devices connected to the IoT. Ziyed Guelmami and Francois Nicolle highlight that this second identity "has become commonplace in Western societies and changed the way we interact with the world and the way we construct our identity."65 While no one profile contains a complete identity of a person's digital footprint, many online websites and big data companies attempt to create a small-scale version by requiring users to create accounts that contain data such as passwords, date of birth, and even credit card information. This helps them to know more about the consumer and personalize their experience. However, this also creates a weak point normally uncovered in the event of a large data breach. Mill believes that the most important maxims to follow are those that forbid people to hurt each other. 66 When each company requires the consumer to input their personal information it makes consumers increasingly more susceptible to hurt whether it be harming

⁶⁴ Mill, 17.

⁶⁵ Ziyed Guelmami and François Nicolle, "Reflections on Digital Identity in the Ontological Cyberspace," *International Conference E-Society*, January 2018, 361.

⁶⁶ Mill, 59.

their digital identity or their physical person since a digital identity is almost inseparable from the physical one. It is important to abide by maxims that protect the consumer from overcontrolling big data companies because "it is their observance which alone preserves peace among human beings." From a utilitarian perspective, big data companies must always put the greater good of American citizens first because doing so will help maintain peace and utility.

The Ethical Schools Combined

The knowledge of how virtue, deontological, and utilitarian ethics interact with issues of personal privacy in aforementioned pages has established a basis for determining ethical consumer data practices. As a result, a recent consumer privacy scandal will be applied to each of the three ethical schools discussed to determine which ethical theory would make the most sense to help create ethical guidelines for consumer data handling. The Cambridge Analytica scandal is a consumer privacy breach that exposed what the American people had previously only imagined—that companies such as Facebook have the technical capabilities to collect consumer data without authorization and share it with third parties. In his article "An About-Facebook?" Micah Sifry states "millions of people are now awake to just how naked and exposed they are in the public sphere."68 Cambridge Analytica was able to access and use the profile data of approximately 87 million American Facebook users with Facebook's blessing.⁶⁹ The most concerning aspect of the scandal was the lack of consumer authorization to retrieve Facebook profile information. For example, it only took one Facebook user's permission to infiltrate the profiles of the friends the user had. If one Facebook user had three hundred friends, then those three hundred friends' profiles may have provided unauthorized data to Cambridge

⁶⁷ Mill, 59

⁶⁸ Micah L. Sifry. "An About-Facebook?" *The Nation* 306, no. 14 (May 14, 2018), 9.

⁶⁹ Sifry, 9.

Analytica.⁷⁰ Sifry shares a common theme found across internet-based services, "you give us intimate personal data and we give you magical services for free…and almost every major website you visit"⁷¹ uses consumer data as the fee for the "free" services offered.

First, the Cambridge Analytica scandal is best interpreted from a virtue ethicist's perspective. There are a few points from Aristotle's Nicomachean Ethics that help one understand why the scandal disturbs consumers and society and address paths for Facebook and Cambridge Analytica to regain virtuous practices. Virtue ethics calls for Facebook to find the mean of the virtue of honesty. When the scandal took place, the absence of fully-disclosed information about the proceedings of Cambridge Analytica accessing Facebook profiles without consent caused the two companies to fall into dishonesty—a vice of deficiency. However, Aristotle writes that when seeking the mean of a virtue one must "avoid the extreme which is more opposed to it."⁷² Meaning, not to fall into the vice of excess that would be similar to boastfulness or an overly transparent company. It is virtuous to be honest, but in a way, too much honesty is not necessary to inform society of the ethical procedures of a business. Furthermore, to show that consumer privacy is important to them, Facebook should train consumers on ways to protect their privacy better across Facebook's many services. Virtue ethics demands it. Aristotle states: "Lawgivers make the citizens good by inculcating <good> habits in them."⁷³ Consumers who use Facebook's platform are, in a sense, "citizens" of Facebook. Since Facebook controls consumer data, they are responsible for providing comprehendible privacy training to protect consumers. On one hand, Aristotle implies that if Facebook were truly virtuous, they

⁷⁰ "Cambridge Analytica Whistleblower: 'We Spent \$1m Harvesting Millions of Facebook Profiles'." YouTube, The Guardian, 17 Mar. 2018, www.youtube.com/watch?v=FXdYSQ6nu-M&feature=youtu.be.

⁷¹ Sifry, 9.

⁷² Aristotle, (Bekker 1109a), 50.

⁷³ Aristotle, (Bekker 1103b), 34.

would inform Facebook users immediately that data was being collected without permission. This immediate action could help rebuild trust between Facebook users and the company more quickly.⁷⁴ On the other, fortunately, there is a solution to regaining trust and virtuous practices. The solution is to practice habitually ethical procedures when handling consumer data because virtue occurs from their habitual practice.⁷⁵

From a deontological standpoint, there is a strict duty imposed on Facebook to protect the personal autonomy and privacy of all user's accounts and personal data. Yet surprisingly, in her article "Data for Sale" Susan Froetschel writes, "Soon after news emerged about Cambridge Analytica's use of Facebook profiles, Mark Zuckerberg issued an apology, admitting that even social media executives had not realized the full potential of their platforms."⁷⁶ It is unlikely that Mark Zuckerberg did not know Facebook was able to give Cambridge Analytica the resources needed to process millions of Facebook user's personal data. Deontology calls for Mark Zuckerberg, as a high-ranking representative of Facebook, to increase his knowledge base of his own company as well as ensure that no form of privacy breach such as the Cambridge Analytica scandal ever occurs again. Furthermore, by protecting user privacy, Facebook would treat consumers as an end in themselves. This would be ideal under deontological guidelines because Kant states "humanity, and generally every rational nature is an end in itself." The Cambridge Analytica scandal broke deontological rules. The absence of properly informing Facebook users of personal data access and granting Cambridge Analytica unauthorized access to numerous Facebook accounts showed that Facebook treated consumers a mere means and prevented them from acting autonomously. Ultimately, Facebook should determine whether an action is morally

⁷⁴ Aristotle, (Bekker 1127b), 105.

⁷⁵ Aristotle, (Bekker 1103a), 33.

⁷⁶ Susan Froetschel, "Data for Sale," YaleGlobal Online, March 29, 2018, 3.

⁷⁷ Kant, 57.

right or wrong regardless of outside factors. Kant states, "it is clear that all moral conceptions have their seat and origin completely a priori in the reason." A priori reasoning is supposed to guide Facebook's ethical decisions before they are made. Facebook did not follow the deontological model because it treated consumers as a mere means. Kant reasons that when acting out of duty Facebook "must look not to the interest in the object, but only to that in the action itself, and in its rational principle." The rational principle that Facebook failed to notice is the protection of consumer data under all circumstances. To return to an ethical standing in society, Facebook must use Kant's deontological theories to show American citizens that it is willing to give users greater control over what data others can take and have access to.

Finally, Mill's utilitarian theories provide helpful suggestions to address the Cambridge Analytica scandal and effectively promote the greater good of American Society. As the primary protector of account holder's information, the majority of the blame for the scandal falls on Facebook. Mill writes, "Duty is a thing which may be *exacted* from a person, as one exacts a debt." This highlights that from a utilitarian standpoint; the duty to take the blame for the scandal may be taken from Cambridge Analytica and imposed on Facebook. Consequently, utilitarian ethics calls for Facebook to place the good of society first when making decisions. When Facebook granted Cambridge Analytica access to millions of consumer profiles, they were not putting the interests of society first. Instead, it put the personal data of millions of consumers at risk. Lisa Eadicicco has a good point when she states "Users may not invest in Facebook with cash. Instead, we offer invisible things: our emotions, our interests, our time and, in the end, our trust." Putting the greater good of society first equates to denying third-party institutions access

⁷⁸ Kant, 35.

⁷⁹ Kant, 37.

⁸⁰ Mill, 49.

⁸¹ Lisa Eadicicco, "Users Can Hold Facebook Accountable," TIME Magazine 191, no. 12 (April 2, 2018), 20.

to any data controlled by Facebook. Besides, granting access to consumer data without consent hurts the consumer's digital identity, which is almost inseparable from their physical one. Furthermore, because Mill's utilitarian theory addresses harming others and explains that maxims that protect others from harm are of the utmost importance, Facebook must do everything possible to protect all Facebook user's digital identities. Thus, utilitarian ethics calls for Facebook to make better decisions that reflect the greater good of society and protect consumers' digital identities across the United States. With the duty to protect Facebook accounts, all three ethical theories apply to Facebook at all times regardless of whether a scandal occurs or not.

Counter Arguments

Important arguments can be brought up to oppose the findings of virtue ethics. First, in regards to the consumers' ability to determine which data is important to them, the average consumer might not be capable of determining what data is valuable after all. However, this would show that consumers need a better understanding of what personal data means and how others can use it to make money legally or illegally. For example, the Pew Research Center found that "63% of Americans say they understand very little or nothing at all about the laws and regulations that are currently in place to protect their data privacy." Part of the problem is that Americans have trouble recognizing how to categorize what data is personal.

Another counter-argument is that consumers still patronize institutions that have had data breaches or improperly used consumer data. Since this is oftentimes the case, why make changes to the structure of an institution's consumer privacy policies if there is no significant pushback

⁸² Mill, 59.

⁸³ Brooke Auxier et al., "Americans and Privacy: Concerned, Confused and Feeling Lack of Control over Their Personal Information" *Pew Research Center*, November 15, 2019, https://www.pewresearch.org/internet/2019/11/15/.

from consumers? Consumers oftentimes do not read or even understand what data a privacy policy for a smartphone app is asking for.⁸⁴ The wording and legal terms in privacy policies must be written so that everyday readers can understand the terms and conditions with full clarity.

An argument one might have against institutions creating universally acceptable data collection practices in deontology is that it is difficult to act on universally accepted principles while keeping an institution's best interests in mind. After all, most economic markets rely on competition, and creating universally acceptable practices within an institution might needlessly hurt their competitive advantage over others. Furthermore, people also have the right to live however they choose to do so within a certain measure of freedom. If consumers desire to use their smartphones irresponsibly, they should be able to make that choice. Therefore, one might argue that there is no need to inform consumers about data collection practices because it is better to protect the consumer's belief that he/she is in control of his/her smartphone data. In response, yes, creating universally acceptable maxims for an institution to follow can be problematic, but only if institutions follow maxims "no matter the consequences." 85 There must be ways of determining the degree to which an action, despite following a universal law, establishes itself as unethical. To help institutions and consumers live ethically, it would be more helpful to use deontology alongside other schools of ethics to create a well-rounded set of data collection guidelines.

The most important counter-argument to the protection of consumer data advocates the enhancement of the consumer's experience while engaging in a service provided on a company's website or app. A company might need certain personal data for services that they offer but even

⁸⁴ Auxier et al., "Americans and Privacy," https://www.pewresearch.org/internet/2019/11/15/.

⁸⁵ Larry Alexander and Michael Moore, "Deontological Ethics", The Stanford Encyclopedia of Philosophy, (winter 2016 Edition), https://plato.stanford.edu/archives/win2016/entries/ethics-deontological/.

still, the risk of a data breach or even data misuse is present. Companies normally use the data stored in the consumer's accounts for marketing analytics. They use consumer data because "this type of information can help increase revenue, reduce costs, respond to customer needs more quickly and accurately, or bring products to market faster." Furthermore, if the consumer data collection and use from account information are problematic then the consumer should refrain from using the products and services offered. To refute, while this opposing view is clear, a consumer quickly understands that services provided in-person are provided online as well. This is the demand of the market. However, utilitarian ethics acknowledges that if companies control the online market demand through requiring personal information on accounts, to promote the greater good of society and prevent the unnecessary use of personal data, they must allow the consumer to choose which data to withhold if it is not completely necessary for a provided service.

For the Cambridge Analytica scandal, Facebook might argue that it cannot follow guidelines from the three ethical schools mentioned in this research because of its duties to shareholders. If the suggested actions called for by virtue, deontological and utilitarian ethics conflict with the best interests of shareholders across the United States, Facebook would consider the guidelines inadequate for its purposes. In "The Diminishing Duty of Loyalty," Julian Velasco states, "Directors are expected to act in the interests of the corporation and its shareholders, rather than in their own interests." This illustrates why it might be problematic for Facebook's CEO Mark Zuckerberg to decide it is best to follow the ethical guidelines of this research. However, to refute, Facebook shareholders do call for the improper use of consumer data to stop.

⁸⁶ Maria Petrescu and Brianna Lauer, "Qualitative Marketing Research: The State of Journal Publications," *Qualitative Report* 22, no. 9 (September 2017), 2249.

⁸⁷ Julian Velasco, "The Diminishing Duty of Loyalty," *Washington & Lee Law Review* 75, no. 2 (Spring 2018), 1037.

In an article on CNN Business, Seth Fiegerman reports that during a shareholder's meeting following the Cambridge Analytica Scandal "Facebook shot down a series of shareholders proposals for better transparency and corporate governance." There were six shareholder proposals voted on after the scandal but the most relevant one to corporate transparency was the proposal to create content governance reports which would oversee Facebook's policies and procedures and report non-proprietary information to all shareholders and administrative positions. However, Facebook did not want to change its methods and was essentially able to overrule the voting process. Facebook has fiduciary duties to listen to the shareholders when they propose corporate change. Fiegerman goes on to mention, "Zuckerberg controls the majority of voting rights at Facebook, meaning he can effectively shoot down or approve measures single-handedly." The schools of ethics apply to Facebook as a whole and especially to Mark Zuckerberg who controls most of the company's decision-making abilities. Therefore, to argue that Facebook cannot follow the guidelines outlined in this research is unfounded because shareholders do call for change and Facebook fails to listen to them.

Conclusion

With the aid of textual analysis and appropriate literature, this thesis has shown that virtue and deontological and utilitarian ethics can help institutions create ethical guidelines to regulate personal data collection across the United States. In turn, consumers will benefit from increased awareness in protecting their personal data, ethical handling of their data, and transparency in data use by corporations specializing in data mining practices. Consumer data is

⁸⁸ Seth Fiegerman, "Facebook Execs Grilled by Investors after Data Scandal," May 31, 2018, https://money.cnn.com/2018/05/31/technology/facebook-shareholder-meeting.

⁸⁹ Seung Lee, "Facebook Shareholders Seek More Accountability as Annual Meeting Set," April 13, 2018, https://www.mercurynews.com/2018/04/13/facebook-shareholders-seek-more-accountability-as-annual-meeting-set/.

important because it contains information about peoples' identity. This research responded to the research question of finding the school of ethics that worked best to benefit the consumer and their privacy by applying them to an important example, the Cambridge Analytica scandal, through virtue, deontological, and utilitarian ethics. By doing so, it was discovered that each of the three schools could be effectively used depending on the overall goal of the company to protect consumer data. A company might aim to (1) be a socially conscious company and protect consumer data out of virtue, (2) protect consumer data because it is their duty to treat consumers as more than a resource for gathering revenue, or (3) protect consumer data because the act of protecting the data promotes the greater good and results in a better society.

Textual analysis provided an excellent model for this research on consumer data privacy in the United States. However, one of the limitations of this research was that it did not follow methods similar to quantitative research because it excluded the use of survey responses, experimentation, and an Institutional Review Board (IRB). However, this is understandable because the scope of this research was not intended for an extensive investigation of physical phenomena. Yet, this allows others to use this research as a background to investigate this topic further. To better study the implications of these conclusions, future research could address the research questions in the introduction of this thesis with surveys to obtain observable evidence for argument as well as obtain IRB approval. Furthermore, one might explore the realm of global data privacy. A step that the European Union has taken to benefit their society is to institute strict laws regarding the collection and use of big data with severe monetary penalties in the billions for offenders. Furthermore, all algorithms are easy to understand by citizens, which leads to communication that is more open between institutions and the consumer. Expanding these

⁹⁰ Carole L. Jurkiewicz. "Big Data, Big Concerns: Ethics in the Digital Age." *Public Integrity* 20, no. sup1 (2018), 52.

ethical concepts to totalitarian countries such as North Korea, China, or Russia would also be an excellent area of research because the results of this thesis were limited since they only addressed the United States' Society.

Finally, this research helps solve the issue of improper consumer data use through the implementation of the three schools of ethics discussed. If corporations and other institutions incorporate recommendations from the schools of ethics it will help them become ethically informed and help prevent data scandals that cause society to lose trust in their intentions for data use. In the literature review, it is easily determined that much research has been done on the current state of data privacy in society and why it causes problems in regulation. This thesis addresses the knowledge gap in today's research on this topic—applying the schools of ethics to problems faced every day in the information technology industry. With the practical insight given by the schools of ethics, the results of this research confirm that data privacy is complex and continued research combined with physical implementation in the workplace would benefit many aspects of life in the Information Age.

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