Essay 2

Emerging Technology

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Digital Genome Technology is quickly revolutionizing the world of healthcare. This emerging technology is capable of analyzing and digitizing one’s genetic makeup where it can then be delivered to a common computer via a USB stick. What is even more remarkable about this technology is that it can all be done for a few hundred dollars. The goal of this is to provide a relatively cheap and quick method to read someone’s genetic makeup in order to personalize the service of healthcare. I find this technology in particular interesting because it is a new and quickly growing technology in an extremely sensitive field. This means that many ethical and legal ramifications could be encountered while introducing this technology in the upcoming years.

Personally, I think that there could be many legal ramifications that come along with this practice when you consider the nature of the practice and how businesses handle the information of consumers on the internet. The digital genome involves digitizing the very makeup of an individual, which some can take very personally. On the other hand, companies will try to get their hands on that information as I can see it being crucial in marketing and advertising online. They already do this with websites today for more efficient marketing. For example, there was a case where Target was able to find out that a woman was pregnant before she knew based on the items she was looking at online. Upon discovering this, the woman sued, believing that her privacy had been violated. Because of examples like this, I think that companies will definitely attempt to take advantage of this information as it will be online, and consumers could definitely find that this violates their privacy due to the sensitivity of the information.

The legal ramifications of this practice could potentially be crucial, however I think that there may also be legal ones that go with it. Because you’re essentially digitizing humans and examining them for weakness, it will be extremely easy for some people to take this as an opportunity to rank people above others based on their genetic makeup. Many ethical dilemmas could arise from people with “superior genomes” not wanting to interact with people whose genomes show history of disease. In a legal sense, you couldn’t force anyone to interact with someone they don’t want to, but would it be ethical to base your opinion on someone based on their genome? How groups such as employers, and even insurance companies, choose to use this information will play a major role in shaping the future of this technology and how it will be regarded in the future. For example, employers could use it to determine who they hire and insurance companies could use it to determine who they will do business with. This information is sensitive and if people choose to handle it recklessly many issues, both legal and ethical, will occur.

Obviously, everyone is a stakeholder in this situation because of how big the healthcare industry is. However, I think the most critical stakeholders are companies, the government, and the professionals behind the practice. The companies include employers, employees, and even the companies themselves. They have the responsibility of determining how this information is handled on a professional level. Companies could easily start to do things like hiring employees without any health issues in their genomes in order to reduce risk. Also, as I mentioned before, this sensitive information can be mined by companies for the sake of advertising online which can create a trend of violating this information for profit. These risks make it the companies’ responsibility to determine what is right on the professional level. The government is behind the funding of the genome practice and can determine what is legal or illegal in regards to the practice. They have the right to fund it and determine the laws that will regulate it in our society. You also have the scientists who are actually working on it. They have an important role in the way that they will determine how powerful the tool actually is and the extent to which they should be practicing it. Finally, the people themselves have the role of determining how it will be handled in society. Their right is to use the service, but also to determine what is and isn’t ethical.

This technology is one that is growing rather rapidly. Research on it initially began in 2013, where the market was valued at $11.11 billion, and it is projected to be $19 billion by 2018. In 2013, it was primarily being used to make more effective and personalized consumables, but in the approaching years it is going to be easier to use and more common. Because of this, the ethical dilemmas this technology presents must be handled rather quickly. We have reached a period where people are literally being digitized for people to examine and the gap of privacy will get even smaller. It is currently being pushed because of how much people believe the positives will outweigh the negatives, but the negatives could strain society much more than we think it will when the time actually comes.

Something I would suggest for this ethical dilemma is to push the privacy of this information and to not allow companies use it for their benefit the way they do with our internet browsing behaviors. I believe this information is too sensitive to be shared and analyzed by corporations and should be protected like our medical information already is. I don’t think companies or even other people should be able to capitalize on the people’s personal information just because it is suddenly easier to obtain. This type of technology should be supported for the morally just reasons and not so others can turn a profit. This technology will be here quicker than we think and we, as a society, must be ready to responsibly handle it.

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