

Advanced Technology: Who Should be Responsible for Our Tech?

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“With great power comes great responsibility” we can thank Stan Lee and his creation, *Spiderman*, for the popularization of this quote. Yet, Voltaire first coined the term (which was inspired from the Bible). This quote means that if you have power, it is up to you to do right. So let us put this into perspective. Technology is a booming industry, one which we incorporate into our daily lives. We use them to do everyday things like check our bank account or drive to work. We also use it to do more complicated things such as regulate our hearts and send messages halfway around the world in seconds. However, often the technology that is developed will not be shared with everyone until a few years after the party responsible for it no longer needs it. This brings up the question of whether or not this is morally right. Should one group of people get access to technology and hoard it from others? Or perhaps the right thing to do should be to share it equally across the board? Should the military be responsible for technology so that they can better protect us, the health industry since they are improving and saving lives, or corporations so they can decide where it goes? I personally think that the health industry can help everyone and benefits the other two industries as well.

What is Technology?

Before we start exploring who should get technology, let us first go over what defines technology. The Oxford Living Dictionary defines technology as “The application of scientific knowledge for practical purposes, especially in industry.” This definition allows us to include more overlooked technology, such as fire. We apply our knowledge of what we know about the

world in order to better improve our life style. We created medicine and cars this way, two things that impact us greatly in different ways. All technology and its development contribute to our lives at every level and we need to keep in mind what technology does to us even if now it does not seem to hold the same importance, but why?

Why We Need To Be Careful With Technology

The technology we chose to use influences our lives and how we live them. Today's use of social media is just one example. Social media changed how we interact with one another, and smartphones only aid in this change because of how accessible it makes social media to us. This type of technology especially contributes to our change in behavior. Casual interactions and conversations, such as unexpectedly running into a friend, do not seem to hold the same importance to us anymore. And if we move to our everyday conversations, we look more at our phones than the person we talk to in front of us. However, we need to note that not all technology is bad. Smartphones allow us to be in constant contact with our friends and family who could be on the other side of the world. We can look up live saving information and share unique ideas with people we normally would never meet. In Noreen Herzfeld's book, *Technology and Religion: Remaining Human in a Co-created world*, Herzfeld brings up three rather interesting rules that the Amish use when it comes to using technology. The first rule questions what benefits it provides to the community. The second rule looks at how the technology changes the relationship between an individual and the community. And finally, the third rule analyzes how technology changes the nature of the community. While we do not necessarily need to follow these rules, they provide an interesting lens to examine technology.

The Government

So why does the government affect the development of technology? One of the major reasons deals with war and therefore, the military. War drives technological advancement because the military is trying to stay ahead of the opposing side (Strickland, n.d.). The military wants to stay ahead and save the lives of its soldiers and citizens by developing weapons, so it places a lot of stress on technological advancements. The military drives technological progress in a couple other ways. The government allows a large part of their budget to go to the military and therefore into research on creating and improving technology that can aide them. Recently President Trump authorized a bill to raise the military budget to \$700 billion dollars. However a previous bill signed back in 2011 caps the military budget at \$549 billion, which remains an impressive amount (Superville, 2017). This allows the military to bypass the funding issues that limit many private corporations and the health industry. Money can make all the difference in the world, especially in the United States. Because the military has access to these funds, they hold the ability to create items that can help our country thrive at a much quicker rate. We can advance faster because of the resources that become available to us. What was that quote about greatness and responsibility?

Technology in Action

One of these developments is the exoskeletons. Exoskeletons are metal frames that help support the body in order for it to safely do more work such as lifting heavy objects and running at faster speeds. The military developed them to act similarly to the suits that we see on characters in video games such as the Master Chief in *Halo*. The idea of a super soldier is

very appealing to the military. By having one enhanced individual capable of doing more work than your average man, wars can be fought and won quicker with fewer casualties. Obviously we desire this outcome because fewer loved ones will be lost fighting on foreign soil. However, the military now shares this technology with corporations that use these to then increase their profits.

Technology Advancement in the Military

Hiram Maxim was an inventor in the mid to late 1800's (The Editors of Encyclopaedia Britannica n.d.). One of his inventions was a new type of inhaler that used pine vapor with "splendid results" (Lafrance, 2016). However, many people scoffed at this invention thinking that he was wasting his time. But why did they think he was wasting his time, you might ask? While Maxim did create countless other inventions, the one he is most famously known for is the machine gun. The machine gun could fire 666 rounds in under a minute (Lafrance, 2016). He did not make the machine for the express purpose of creating a weapon of mass destruction but rather out of curiosity. It was said that he believed that no one would use it because they couldn't bear to inflict that kind of pain on so many people in so little time. He created it in order to end wars, not start them. However, he was horrified to learn that it was used against man with great effect. As the creator of this weapon, Maxim earned a lot of fame. This begs us to reflect upon ourselves and ask if this is how we want our world to work, putting emphasis on destruction rather than on aiding those who truly need help. While the military does drive technological advancements, does it drive them in the direction we need?

The Government's Impact on Society

This leads to other issues with American ideals. Think about public shootings. Why do they still happen? A study done in 2016 found that the United States had 133 mass shootings while Switzerland had only one (Fisher, 2017). So what is the difference? Switzerland holds much stricter laws when it comes to gun regulations: limiting who can buy licenses, maintaining licenses and the types of guns that can be sold. However, this is not the only difference between the two countries. In the United States we see owning a gun as a right while in Switzerland it must be earned. In the United States we would rather have access to weapons than our children safe in schools and in public. What does this say about our country? This brings us back to Herzfeld and the Amish rules of technology. Does this change the nature of our community in a positive or negative way? As Maxim says, "From the foregoing it will be seen that it is a very creditable thing to invent a killing machine, and nothing less than a disgrace to invent an apparatus to prevent human suffering."

Corporations

Now let us take a look at another contender for technological advancements: corporations. As previously mentioned, the government has a lot more access to funds with the main goal to stay ahead of the opposing side, a.k.a. other countries. Corporations must also stay ahead, but in order to make money. Although many do receive funds from the government (Mazzucato, 2013). Corporations are driven by people and need while the government has no need to gain profit (Lu, 2009). The government theoretically already has the money it needs in

order to charge ahead into the future, whereas corporations need to gain that money as they try to follow. In order to do so, they must appeal to the most people. They do not necessarily have the same freedom as the government to pursue their own interests. They must instead gage what the people want and adapt to that. Think about the evolution of the smartphone. You may immediately think of Steve Jobs and Apple; however, the first smartphone came about in 1992, 15 years ahead of the iPhone. It was called the Simon Personal Communicator and could make and receive calls as well as emails, faxes, and even had a notes section (Tweedie, 2015). It essentially combined a phone and a PDA. So instead of having to carry around and keep track of two items, now you only have to worry about the one object. I remember before I got an iPhone and had to carry around both my flip cell phone and iPod so I could listen to my music and how relieved I was when I got my first iPhone. First world problems, am I right? So this company knew that this was a common issue and decided to improve it. But think about it. You had to pay for two separate items and you could very easily lose one or the other. Now you only have to worry about the cost and whereabouts of the one item. It is convenience, that was the market for the Simon smartphone.

Technology in the Private Sector

Technology in the private sector is about life improvement. We do not need a coffee machine but it sure beats taking the time to build a fire and boil water. Think about what types of technology come from these corporations, things that once were considered a luxury such as computers or tablets or toasters. To us they may seem like everyday objects but in other places, these are rare sights. Technology can provide something that we consider to be a given:

knowledge. Computers give us access to news and history which can make a huge difference. With technology, people in developing countries have access to information about diseases that they did not have. Having access to a phone allows people to get their paychecks electronically and on time which helps boost and improve their economy (Elkins, 2017).

The Paradox of Corporations

However, businesses are not all 100% benevolent. By having to focus on making money and the cost versus profit issue, the same people who these companies are trying to placate, are being thrown under the bus. In the United States the minimum wage is \$7.25 or \$6.26 after taxes (United States Labor Division, 2017). Meanwhile, foreign companies pay well above the US minimum wage. A few examples such as Aldi, a German company, pays its cashiers a minimum of \$10.50 (Cronan, 2014) while Ikea pays its workers a minimum of \$11.87 (Roberts, 2015). I know friends who are willing to quit a job that they have held for several years to try for a higher paying job, simply because they can earn an extra dollar or two per hour. But how does technology play into this? Because companies are looking for the most bang for their buck, they often replace human workers with machine that can do their jobs quicker, cheaper, and more efficiently. In southern California for example, refrigerators are being driven across the state by autonomous trucks (Davies, 2017). This does have quite a few benefits. Delivers across long distances will no longer be limited by how far a driver can drive in a day. After all robots do not need to eat, sleep, or use the bathroom. Another benefit is the cost. Instead of continually having to pay drivers, these companies only have to pay to have the device installed into the vehicle.

The cost overall is cheaper but what about the drivers? Currently, the autonomous cars on the road have a human passenger to make sure everything goes correctly, but companies plan to get rid of these chaperones as this technology progresses. A prediction of around four million jobs will be lost due to these self-driving cars being released on the roads (Kopf, 2017). That is four million people without a job they were relying on to support their family. This goes back once again the Herzfeld and the three rules of technology. How does technology change the relationship between the individual and the community?

Health Care

At one point or another in our life, we have relied on the health industry to keep us going. Whether it was baby care, a case of the flu, or the effects of aging, we all need the care and concern of doctors. And because of technology, doctors can better help their patients. Technology has saved numerous lives through vaccines and surgical techniques. With their help we understand the human body and how it works better than ever before. With technology's help, we constantly improve the health industry from research, the patient doctor communication, and the machines that keep our bodies functioning as they should (Reed, 2017). Many of us are alive today because these inventions allow us to bypass natural illnesses or disabilities that years ago would mean death. Asthma can be treated with medicine, diabetes can be managed, and allergic reactions can be treated.

Technology in the Medical World

Technology in the medical world has vastly improved our overall health. With the help of the internet, doctors now have access to all kinds of information that can help them better

diagnose and help their patients. Technology increases our life expectancy due to the ability to fight off diseases and illnesses as well as manage chronic conditions of patients and more (Alton, 2017). Technology also helps doctors share information faster and easier, making it easier for doctors to find information that can help them with rare or strange cases. Doctors can also talk to each other in real time. This allows them to discuss mutual patients and how to best treat them, without having to fly across the country or even the world. And in turn, electronic medical records means that doctors can access their patient's records in seconds and there is less of a chance of important information being lost. Patients can now even get apps that allow them to easily manage their health and set up appointments with doctors. And for those who live in rural areas with no easy access? A simple Facetime-like service can connect them face to face with an actual doctor or nurse who can help them through their health issues (Rauv, 2017).

Another benefit that technology holds is the aid of disabled people. Since the 1970's, the amount of people with disabilities rose 10% (Monaco, 2013). And with the help of technology, their life style can be significantly improved. Robots can be made to help them with everyday activities such as cooking, cleaning, and other tasks that can be difficult depending on the person. Another type of robot that can be used for more psychological issues involves creating an animal that the patients can interact with. One of these examples is the PARO, a robotic seal that is used to help relax patients, which has been used in Japan and Europe (PARO, 2014). The seal has been especially useful in the case of patients with dementia, although this may be due to the fact that they do not understand that the robot is not a real seal (Birks, 2016).

Technology and the Morality of Longevity

So if this technology keeps us living healthier and longer, should not we be putting our time and resources into it? This would seem to be the obvious answer; however, the health industry holds a lot more twists and turns. Since the mid 1800's, our lifespan has been increasing at a fast pace. Over about a thousand years we have added 30 years to our life expectancy. However, as humans we want our loved ones to live as long as possible. We want to keep pushing until the end. But should we? Atul Gawande's book, *Being Mortal*, goes into why as humans we need to learn when it is time to say goodbye. There is a time where the quality of life we live must overcome our want to live on. Many children who must watch the painful process of their parent's death simply want to hold on for as long as possible. They want every second they can get. But in the end this does more harm than good. In their last moments some people can suffer pain from treatments that prolong their life.

The Trust We Place in Doctors

Doctors often see us at our worst. We come into their office, sick and worried and not at our best. Because of this, we must place a lot of trust in doctors to do what they believe to be best for us. After all, they are the ones with the degree and the know-how. A survey conducted by the American College of Surgeons found that patients spend an hour or less researching their doctors. Patients tend to spend more time researching a car they want to get than the doctor who will be cutting them open (Chen, 2008). This shows just how much we expect out of doctors to do their job right. We do not even want to question their knowledge. However,

some doctors do not always have their patient's best interest in mind. Some are more interested in the money they can make. For example, The Dr. Oz show features Doctor Mehmet Oz who tells his audience about different pills and medical treatments that can benefit their health. In 2014, Doctor Oz mentioned a green coffee bean extract that he said promoted weight loss. After the episode aired on TV, the product saw a rapid rise in sales (Biography, 2014). But all was not well in the medical world. Many doctors pointed out that there was no supporting evidence that the extract actually worked. This is a continued trend with many of the products he promotes. This however, is an extreme case and should not be applied to all of our doctors. For the most part, our trust that we place in doctors is well founded and hopefully will continue.

Conclusion

All this information is nice but it does not answer the question: who should get technology? Let us look at what technology is supposedly doing for us. We create technology in order to further ourselves as a society, to progress. But what does progress really mean? Merriam Webster defines it as "a forward or onward movement (as to an objective or to a goal)". This raises the question, are we really progressing as a society? The military's technology tries to protect us from outside threats but overall does not allow us to progress together. In fact it discourages it all together. The whole point of their technology is to keep their country on top of others. There is no show of unity, except in unity against others which does not count for our purposes. So what about corporations? The whole point of their progression is for themselves. They just want to increase their profits and, as we have seen, they hold no qualms

about tossing their workers aside to do so. However, the health industry is for the people. They want to keep us going for as long as possible and keep us as healthy as possible. There are some issues with monetary gain but that mostly deals with when corporations get involved with the health industry.

So when we get down to it, if the health care system is left to its own devices with no interference from the government or corporations, we as people living in the same community benefit the most from it. Once again going back to Herzfeld and the Amish communities guidelines, the health care system has the most potential to do good in our world. It provides an extreme benefit to the community, increasing the quality of our lives. It also potentially could increase the individual and community relationship. Think about it. We would be looking more into the care of others. Imagine groups of people putting their time and effort into improving the quality of life for those in their community. And finally the nature of the community, if we move our focus to the wellbeing of others a change in our priorities could occur causing us to care more for others than focusing on ourselves. As Tenzin Gyatso, the Fourteenth Dalai Lama, has said: "The more we care for the happiness of others, the greater our own sense of well-being becomes."

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