

## **Does Technology Need To Be Regulated**

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*In this paper I will be discussing if we need to rethink how technologies are regulated.*

*Next I will bring up arguments for and against regulations. Finally I will give my stance on whether we should regulate technology.*

### **Introduction**

Growing up in the era of the dot com bubble, the speed in which technology has grown has vastly changed the way we live our day to day lives. From using floppy disks to move and store our information, to nowadays being able to transfer and store information to the cloud. From reserving time to have a conversation with your significant other or friends using the home phone that everyone might hear, to being able to facetime one or even multiple people at the same time. All of these examples have come within the last twenty years. We have welcomed new innovations and even encouraged it because it has ultimately changed our lives to be more convenient. [1] The thing with innovation, is if it becomes unchecked then people will be able to find new ways to weaponize technology. With how fast technology is developing and changing, should there be a new focus or tactic on how we should regulate or manage new technology? Also is there even a need to regulate up and coming technology? On one hand, putting too many rules and regulations can stifle the progress of new inventions. [2] On the other hand if we aren't ahead of this new wave of technology then one creation could cause irreparable harm. An example of this is what we see currently developing in the bio cybersecurity field.

### **Cyber Biosecurity**

“Cyber Biosecurity is being proposed as a formal new enterprise which encompasses cybersecurity, cyber-physical security and biosecurity as applied to biological and biomedical-based systems” (Murch et al., 2018). This may be a new and up and coming field but

we see this in our daily lives. Some consumer examples are Fitbit's and other fitness trackers. They are able to monitor heart rate to see how much daily exercise we are doing. Then we are able to log into an application on our phones to even keep track of our calories. They can set goals and fitness plans to achieve a healthier lifestyle.

One new innovation that we should be monitoring is the CRISPR-Cas9. "CRISPR-Cas9 has emerged as a simple, precise and most rapid genome editing technology. With a number of promising applications ranging from agriculture and environment to clinical therapeutics, it is greatly transforming the field of molecular biology" (Shinwari et al., 2017). This invention can change the way we look at diseases and disabilities. The CRISPR-Cas9 can do a lot of good things for the world but because it is so new, there are some ethical considerations that we should be aware of.

This topic has a multitude of considerations. First, I think testing on baby embryos that have no say into whether or not they want to do it is a gray line with many implications. In our current societal environment, with laws and arguments of abortion and what rights do women have in that regard I can see how both parties may have major regulations towards this. Like it says in the article we don't know the mental and physical health effects for the long term. Yes, we can do studies and have tests done in a lab but once this goes public the only way we will know what happens to these people long term and just wait and see and at that point it will be too late for all the individuals that have taken part in gene editing. Another thing is how many children do we have to test this on first for this to even be proven right or wrong. I understand that science is going to go this way but I am not looking forward to the ramifications that will come of this. I can see that their initial goal was to invent something for the people that will help cure and get rid of life altering diseases but without regulation I can also see the CRISPR-Cas9

being weaponized. [3] For example, instead of cutting genes to create healthier attributes for the embryo, they could put bad genes into the dna. The embryo and parents wouldn't know until that issue rises which would be too late. Think about it, pharmaceutical companies make money by selling medicine, the more people they are able to buy it can create life changing profits. While it is important to be aware of new technologies in the medical field, we should also explore how new technology is affecting businesses in our current society.

### **Technology In The Workplace**

As we come out of the covid era, it is apparent to notice how business and companies are using technology. In light of the world shutting down, we were able to see business develop a new strategy revolving around working from home. Many businesses before covid expected their employees to come into the office and work forty hour work weeks. Now we can see that it isn't necessary to come into the building. Working from home comes with various benefits for the business. First they are able to save money on their overhead. Finding spaces to rent out, paying for utilities, and filling the office with all the supplies that are needed to conduct an effective work day. They can save all that money and transfer it to the employee. Second, they are able to have a more competitive job force. Companies that are in less popular locations can now compete with companies in the big city because they actually don't have to force their employees to move to new locations. The creation of technology that makes it possible to work from home comes with many benefits but can also come with disadvantages as well.

According to Mahr, "The term workplace deviance refers to any voluntary employee behavior that breaks significant company norms with the result of jeopardizing the well-being or productivity of the organization or its employees" (2022). How I see it, the type of deviance slides on a scale. It can go from one extreme like taking a little longer in the bathroom, or

spending a little more time on break than currently allowed to the other extreme like selling company secrets, or knowingly spreading viruses from the inside.

Nowadays with the progression of technology, comes the progression of more unique types of workplace deviance. Some of the examples that I have seen are a mouse mover. This is a simple type of software that can be downloaded onto your home desktop that moves the mouse every so often. Some companies that allow work from home or use a hybrid model tracks the screen time of their employees. In this scenario the mouse mover keeps the screen from going to sleep and that helps them from triggering an alert to their boss or supervisor. This can greatly jeopardize the productivity of employees because as it might look like they are doing work they are actually busy with other tasks or running errands away from the computer while on the clock. An example of a major type of workplace deviance would be unauthorized usage of sensitive company information. The invention of emails is not a new technology but the ability to just send important files and other data with just the click of a button. Or maybe a disgruntled employee before they are terminated decides to sell or send the competition data that is meant to be kept secret. Technology has made our lives drastically more convenient but with convenience comes the price of vulnerabilities. Now that we have looked at how technology is advancing, we should now see how markets, businesses, groups and individuals should be regulated or limited.

### **Regulations & Limitations**

After reading Peter-Paul Verbeek's piece on designing the public sphere some different methods of regulation or limitations crossed my mind. Before reading this article I didn't even know what intelligification was. Verbeek describes it as our smart devices getting smarter. According to Verbeek, " Objects in our lifeworld, in other words, are becoming intelligent. Hospital beds can detect if patients fall out of their bed or step out of it. Doors in geriatric homes

can determine who is allowed to go outside and who is not” (2014). With how technology has developed in the last ten years an emphasis on regulations needs to be prioritized before it is too late.

I think the first aspect that deserves limitation is privacy and consent. In the article Verbeek points out how smart mirrors in hospital waiting rooms edit one's face to see what they look like if they continue their unhealthy habits. In concept, that is a type of scare tactic that might persuade them to make better life choices. [4] My main problem with this type of technology is first, other people in the waiting room might see this as well. What if they don't want their unhealthy habits out there for people to see. On the other side of the coin, what if they edit someone's face as a heavy smoker but they are not. They could be spreading false information to people in the waiting room and the staff. With businesses and markets, I think they need to focus more on consent and privacy. I think they should make laws on what kind of personal information can be collected. Regulations will be most effective when there is a bill or law attached. Enacting laws like how the European Union did with the GDPR would be a step in the right direction.

### **Conclusion**

Thinking back of how technology was twenty years ago to now needs to be applauded. With innovation comes readjustment. Our way of thinking changes and what may have been normal before will have become old fashioned now. I personally think that regulations and laws protect society. I can be for new technology and fast development but too much of a good thing can be a bad thing. I think of regulating technology as driving on the highway. We are all on the road to get to a destination. The faster we get there the more time we have in a day. The thing is if you drive too fast you may end up losing control and hurting others.

## References

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