Technology is not a new concept. Humans have been innovating ways to make life easier from the beginning. Recently, these changes have been coming faster and faster. The effects of these new inventions cannot be measured or seen before a newer technology is born. For the sake of this paper, only the technologies such as televisions, digital cameras, the internet, and mobile devices will be considered. Technology itself is not a bad thing; actually, it has helped better millions of lives by providing faster and more easily accessible information for education, job performance, and entertainment. However, it is becoming more of an impact and prevalent in the lives of its users. This leads to higher rates of technology addiction and can lead to numerous social, physical, and psychological problems.

The Reach of Technology Today

Facebook. When I was traveling in El Salvador, I found that people who do not even have electricity in their homes have a Facebook page. It allows individuals from all over the world to express themselves by connecting with each other, sharing photos and videos, and playing games. In terms of population, Facebook would make up the third largest country in the world behind China and India (Das & Sahoo, 2011). Obviously, people are counted twice to make this statistic (one cannot belong to both the United States and Facebook), but it clearly shows Facebook’s relevance in today’s society. It bypasses its other social networking competitors (Twitter, Myspace, and LinkedIn) by more than 300 million users combined. Users spend an average of seven hours a month on Facebook alone (Das & Sahoo, 2011). This is not including other websites that they visit or technology apart from the internet.

The World Unplugged was a study that included 1,000 students worldwide who abstained from all media for twenty-four hours. During that time, these students complained of feeling sad and depressed, dead, and even had a horrible day because they could not access technology (Moeller, 2012). This study also found that the students had a sentimental connection to their media. One student felt lonely without it (Moeller, 2012). All of this begs the question: If this is what average people are saying, what is it like for those addicted to technology?

There has been much debate about how to define this addiction, but no
one has been able to agree on anything (Razieh, 2012). Most definitions include continued use of technology even after it has caused problems in one's social and professional life (Gencer, 2012). Rao, Indla, and Reddy found that addicts spend about forty (not attributed to work-related time) hours per week on the internet (2012). Video game players who play two to seven hours per day become less aware of what is going on around them even when they are not playing (Rao, Indla, & Reddy, 2012). Could the technology zombie apocalypse already be starting? Those who use the internet excessively have a different brain composition than those who spend less than two hours each day (Cohen, 2011). This is not the only frightening effect that too much technology can have on a person.

**The Effects of Technology**

Human brains naturally desire instant gratification (Cohen, 2011); for technology, this comes in the form of checking for emails, communicating with someone from far away, taking pictures and seeing the photograph right after you take it, and having directions spoken right as one needs them. The expectation of possible rewards (a breaking news story or getting to a new level of a game) offers more motivation than knowledge of constant rewards (Rao, 2012). Most people will keep checking their Twitter or keep playing a video game just in case something changes from before. Most of modern technology functions in this way.

New technology is also mostly targeted and used by the younger generation. This is concerning because this new generation will never have known life without personal, mobile computers. Also, these children are using and relying on this technology when their brains are still developing, which means there is even more of a chance for them to become addicted to it (Gencer, 2012). When talking about technology addiction, the social, physical, and mental implications must be considered.

**The Effects of Technology Addiction**

Addiction of any type negatively affects a person's life. Because technology addiction is so prevalent among young people, especially students, their education is impacted. Today's technology calls one's attention several ways at once (texting and driving, listening to music while doing homework, talking on the phone while surfing the internet, etc.). This means one gives only partial attention. This leads to “popcorn brain” (Cohen, 2011). So much stress placed on the brain causes burnout (Rao, 2012).

Digital relationships and face-to-face relationship are inversely related. Stanford University found that people interact directly with others thirty minutes less for every hour spent dedicated to technology (Rao, 2012). Because human interaction is a learned behavior, the more time someone spends relating to other people through technological mediums, the less able he or she is to detect subtle facial cues and gestures (Cohen, 2011). Losing this ability means that he or she becomes more socially inept and could become anxious when dealing directly with other people. The use of technology can also be directly linked to people who
have social anxiety (Razieh, 2012). This self-perpetuates the use of and reliance on technology.

These are not the only adverse effects of abusing technology. When people become more isolated through technology (though in theory it is used to interact more), gene transcription starts to malfunction, immune systems are disturbed, and there are more heart risks. They also have a higher risk of contracting a chronic disease (Das, 2011). Technology addiction affects the way brains recall information (Rao, 2012). It also reduces motor and psychological development (Jagadesh, 2013).

On top of the social and physical effects, there are also psychological effects. People who are addicted to technology regularly experience depression, irritability, and do not think clearly (Rao, 2012). Part of the reason certain technologies like online games and applications on a smart phone are so addictive is because they give those who play them “psychological highs” (Vaidyanathan, 2010). Technology is clearly addictive and has many negative outcomes. Why is it still normal to completely immerse oneself in technology rather than lead a life in direct connection with other humans?

The Vicious Cycle

Another name has emerged for the “Generation Y”, the “Me” generation (Rogers, 2013). The people of this generation are ruled by a “What is in it for me?” mentality. Businesses have realized this and have started marketing campaigns that center around consumers who are looking for “pleasurable experiences” for themselves (Park & Lee, 2012). The technology developed to reach these consumers has also improved, making it quicker, easier, and cheaper to developed personalized ad campaigns. These technologies come in the form of cookies and a new “fingerprint” method that track one’s activities on the internet (Hoofnagle, 2012). It is logical to assume that as the technology develops, people will be confronted more frequently with only things they are interested in. This creates a “bubble” which will isolate people even more. As people become more isolated, they become more socially anxious. This leads them to use technology even more, and the vicious cycle is created.

Conclusion

The reach of technology is undeniable. With “average” users spending hours upon hours online daily, it is safe to say that new technology has been integrated deeply into American culture. Though all of its true effects are not known, the impacts of technology on all areas of a user’s life demand attention. If the addiction, social isolation, depression, immune system disruption, anxiety, and other effects are not made known and taken into consideration, it will fuel the vicious cycle that has already been created by technology, its users, and companies.
References


