**Fall**

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Final Exam MEDST 255 Professor Andrea DeFelice

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**Fall**

**Essay Question I.**

**New technologies have always produced unintended consequences. One result of this would be how UX designers and engineers face a number of new ethical challenges today with the rise of technology regarding our interaction with it and dependence on it.**

**What is the primary job of a UX designer? Discuss the principle ethical quandaries faced by UX designers. What is persuasive design? Discuss the ways you feel this positively and/or negatively affect user behavior.**

Technology is the collection of techniques, skills, methods, and processes used in the development of products or services or in the accomplishment of objectives in scientific investigation. The overall objective is to make human life more practical and easier through new technologies. Behind the developments and creations of new technologies are by UX designers. UX designers could be a group or a person in charged of the developments or enhancements of a completed product. The techniques used within the UXD are the task analysis, the design, and the conduct usability and beta-testing. Those techniques are what capture consumers to want the product, system, or application. Yet there is always both a positive and negative impact of the technologies.

One way they sell the product is through one of the principle ethical quandaries, influencing the user. A persuasive design is part of the principle through the colors being used, the set-up and the benefits it provides for the consumer that attract. Yet they will never show the negative attributes.

Social media accounts were a creation to “offer people the opportunity to reimagine themselves and to become subjects as opposed to merely playing identities, as one finds in virtual environments such as a second life,” as said in *Understanding New Media.* We as society have become dependent on these social media technologies. The average percentage humans spend on social media is about 60% according to a study from Mediakik. The upside of social media is the benefit of rapid communication and the creation of communities within a virtual world but the downside would be the dependency of the identity construction it creates whether it’s fake (catfish) or true. That same idea of identity corresponds to the process in creation of the product creating personas using information about the user most relevant to your daily needs or business to relate to the user. Scenarios and storyboarding are built to show how the interaction will play in a real environment. Alongside will be the pitch and critique technique showing the relation to the users customers/staff/community and see solutions it may bring.

Another principle ethical quandaries that UXD has faced are the erosion of privacy. Millions are people sign-up to these social media account placing their private information and are being placed on an open wireframe platform [internet]. Facebook in the past years has had privacy issues. One issue that was alarming was in 2013 when a Facebook bug exposed users private contact information. Five years [2018] later it was revealed that Facebook knew about massive data theft, Facebook apologized and made policy changes. Although we know about incidents like such we maintain to keep relying on the computer system.

Human costs and de-valuing work has been another principle ethical quandaries and challenge that UXD has faced. The Foxconn suicides were one of the tragedies caused by de-humanization in these technological companies. We enjoy the new technologies and don’t realize who are the producers and contributors of the parts of these products. Most of these companies abuse the employees and only care for the profit setting in the company like the story of Tian Yu in Foxconn, the long hours and poor pay causing the young workers to take their lives away.

New technologies are also diminishing the value of the workers by replacement of humans with machinery. Banks now have machine banking, kiosks replacing cashiers and human interaction. Yet there will be more technical jobs expanding education for the future generation.

I think UXD will need to look at both the cause and effect when building these products and systems to avoid the ethical quandaries challenges. Think along the lines of the negative outcomes that it might cause.

**Essay Question II.**

**The rise of digital technology has had a massive impact in the international creative community. Small digital video cameras and editing software have made it easier than ever for aspiring filmmakers to make a movie. Inexpensive recording software has done the same for musicians. Digital photography now rivals the traditional chemical process for resolution, while image manipulation is simpler and more sophisticated than ever before. Ultimately, the Internet provides a worldwide platform for artists of all stripes to share his/her work.**

**What are some of the core characteristics of the digital world? Discuss how these have impacted the arts. What are some specific developments that have impacted artists? In what ways are they unrewarding and in what ways are they beneficial?**

“The human spirit, when it’s allowed to become made manifest through art, it’s going to create greatness,” said artist Moby in the *PressPausePlay* documenary. Humanity have lived on earth for billions of years and have been the creator of all art we may know, Mona Lisa, Eiffel tower, etc. But to top it off the creation of technology has been the biggest creation of all. Technology has been a platform that keeps evolving day after day. It has given human kind the ability to share their art through it and even create more art within it. It has a caused a major impact in positive and negative scale. Art has taken a huge evolution over the year due to the technological changes and the economical changes increments.

When spoken about economical changes it the reflection of the financial benefits artist receive for their work and it can be agreed that hard work should be paid. But in the downside most artists have lost the purpose in making art for the passion and love. But the ones who do it for the love for the arts have taken advantage to show the world what they can create. It can be broken down by the characteristics of the digital world.

Digital technologies are technologies that grab information into the process to be created and stored in digital forms with the possibility of distribution in electronic networks.

One characteristic of digital technologies within the arts is how they are becoming electronic. “Material is in electronic rather than in a physical form. They do not have to be a physical object (book, painting, photograph, film reel, etc.) for something to exist as an artwork.” An artwork can now be created from a recording from the physical world onto a digital device or Internet website or social media platform. Examples can be podcast or even radio recordings. The editing process is then placed on programs such as adobe audition. The art of graphic design is another form of electronic art. Picture can be redesigned, put together or eve enhanced within a Photoshop program. The capacity of keeping art electronic would be rather beneficial in the aspect of organization and more space to create.

Next is the network, the platform of distribution, storage and expansion. The networks allow the electronic material to be seen, shared, and changed. An example is Instagram, a social media platform where millions worldwide share their pictures and videos. You have the ability to edit your pictures and videos within the app to be shared. Another benefit is how instant and available digital material can be obtained. Digital books and videos can download and be stored in a digital file.

Digital photography has replaced the chemical dark room process into a more practical, resolution and image quality.

Music industry has had an evolution in its process. Before people didn’t make a music pieces or projects by themselves, they needed to go to a professional and was very expensive. It took money and a purpose and acceptance for the product. It no longer is a music industry with the open space of the Internet to share and make music. The only downside is the competition that it holds since there are millions of people reaching to be seen and heard by these big music industries.

Radio has changed as well, before a license was required to work within the industry. Now a bachelors or experience is the only requirement to be part of the radio industry, it only takes to know a few buttons and the recording system.

Technology have impacted film in varies way from the usage of camera lens to the implications of special effects to create great films. Walt Disney was an artist who created colored cartoons such as Snow White and incorporated both humans and cartoons in a film famously known as Mary Poppins. He started drawing cartoons and taught himself the techniques of animation. He then borrowed a camera and started his first cartoons called the *Laugh-O-Grams.* This was all done in the mid 1920s and was the start of animation from the famous man Walt Disney. Decades later we see animation take a new phase with digital computerized animation like Pixar movies. CGI is then invented as well to create animation and special effects like the first creation of the 1977 *Star Wars: A New Hope.* The films created a new culture within the film community. *Star Trek* was another science fiction show that created the sound and image technology. The setting was always based on the ship but the stories were told with the sounds created. CGI was later introduced in the shows seasons.

Filmmaking has been made for practical and inexpensive due to the programs for editing available. There have been short documentaries created and filmed on an iphone device. We may say that the technological enhancements and developments in the arts has given a positive impact in the world with the opportunity to share and spread the arts.

**Essay Question III.**

**Human enhancement technology converges nanotechnology, biotechnology, information technology and cognitive science to improve human performance, attempting to temporarily or permanently overcome the current limitations of the human body through natural or artificial means.**

**Discuss some specific developments in human enhancement technology. Do you have trouble with the idea of these technologies making us stronger, faster, better? Do these advancements come at any cost? Such as privacy issues or a question of morals? What technological innovation do you think we need most and why?**

Humans have always have had the will to seek and explore new innovations. One is clear to see is the human enhancement technology. One of the main reasons is to make a life expansion, taking notion of life extension and looking beyond the biology. The human life is studied to last about 122 years. The researchers become a package of designers where the design is part of the problem solving, scientist, artist and practitioners. They build a field where people can live healthy as long as they can.

We can look into cybernetic the study by the originator Norbert Wiener. Due to cybernetics we have had the possibility to have space exploration and be in 0 gravity. Behind it is the idea of cyborg where the human and machine integration to allow humans to be in 0 gravity. This is an example that humans don’t just work and live in a biosphere but in a cybersphere as well. It is an adaptively for human interaction with technology.

We have since much of the innovations in technology with the creation of body prosthetics and artificial models. Prosthetics devices enable those without their bodily functions to have devices that sometimes are even better than our own biological devices. This technology has given life back to those who have lost a leg or arm at birth, war, or an illness giving them back normal life. In process to creating of those technological devices is the 3D printing.

The technology of 3D printing has given the ability to create implants and prosthetics never seen before such as tissues with blood vessels, prosthetics, prescription drugs and, tailor-made sensors. One the biggest health conditions have been involved with the heart, a very sensitive and fragile organ in the body. A flexible silicon sensor has been created to monitor the pulsing of a living heart. This innovation has the ability to keep in record the technique of heart-monitoring both for healthy and patients with heart conditions. Another advancement in 3D printing is the reconstruction of bones and cartilage. Many cosmetic surgeons use this technology to construct ears or noses. The creation of synthetic skin to patients who have been burn has uplifted lives of people.

Then there are the human enhancements where there is an attempt to temporarily or permanently overcome the limitations of the human body through natural or artificial means. Medicine has been an open field to a daily lab of developments and cures. Many of the impressive ways of human enhancements is the organ transplant. As risky and difficult as it has been, it has saved millions of lives. Nano-technology has taken part of the human enhancements.

“If the future of Nano-technology is as promising as it’s purposed to be, the molecular manufacturing will be at desktop and everyone will have enough clothes, food, and medical care,” said Natasha Vita-More a scientific technological designer.

Nanotechnology is the manipulation of matter on an atomic, molecular, and supramolecular scale. It is hard to imagine how small nanotechnology is and how it can be used across other science fields such as chemistry, biology, physics, material science and engineering. It has been induced for projects in healthcare, implants and prosthesis, energy generation and conservation, and security and defense with smart materials.

I believe that overall the advancements are for the better livelihood of humanity but I do think that some ideas are to extreme for the development of the human body to enhance. The human body is fragile and cane only take as much.

Humanity is entering a "trans-human" era, where biology is treated as something to be manipulated at will, depending on one’s lifestyle interests rather than health needs. But questions remain about how far society is prepared to accept these kinds of applications and what ethical issues they create.

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