The positive and negative effects of technological advancements

Technology

Cez Danielle M. Lagbas Technological advancement, with no doubt, is such a huge impact in shaping the world. As humans, unlike any other living creature, we have the ability to use our mind for reasoning. Reason is the capacity for consciously making sense of things, for establishing and verifying facts, and changing or justifying practices, institutions, and beliefs based on new or existing information. [1] With this power, we are able to imagine things, and with our clever minds, we are also able to create these imaginations.

Creators, inventors, experimenter, maker, founder, innovator, pioneer – these are what we call the people behind everytechnologyexisting at present. Invention has made the world what it is today. It absolutely helped our society develop into a much better world. This whole aspect of invention is what we see as technology. Technology is the making, modification, usage, and knowledge of tools, machines, techniques, crafts, systems, methods of organization; in order to solve a problem, improve a pre-existing solution to a problem, achieve a goal or perform a specific function.

It can also refer to the collection of such tools, machinery, modifications, arrangements and procedures. Technologies significantly affect human as well as other animal species' ability to control and adapt to their natural environments. [2] Technological advancement is responsible for many changes as well in world population, life expectancy, educationlevels, material standards of living, and the nature of work, communication, healthcare, war, and the effects of human activities on the naturalenvironment. Not just these conditions are affected, but also our society and our individual selves. [3]

I. Medical Technology Technological Advancements have been a really huge help to the field of medicine. Technology has cured and healed millions of people all around the globe. It has affected the living of humans in a good way, and if abused, affects us in a bad way. This field deals with the maintenance, prolongment, and restoration of humanhealththrough the study, diagnosis, treatment, and prevention of disease and injury. Research in this field has allowed doctors and researchers to discover many new treatments, drugs, medicines, and solutions that have helped lengthen the human life p. 3] This aspect of technology ensures the survival of humanity. Without technology, people would have been struggling with their health. Medicine has saved numerous innocent lives, and today it is much safer for people and for the environment. Medical technology instruments include contact lenses, wheelchairs, stethoscopes, prosthetic limbs and any other instrument that can help in diagnosing or treating an ailment. Filipinos with tumors can get a scan from a machine and this can already cause them accurate results for their surgery.

Transplants also involve a very modern technology which has also helped lives. Pregnant women can check if their baby has abnormalities at a young stage of their pregnancy with the aid of technology. Neuroprosthetics have been invented so that people with paralyzed body parts can move again like they used to. Neuroprosthetics are implants placed on a nerve, or onto the central nervous system, in order to replace mobility lost by accident or disease. Motor functionality in the body reacts to outside stimuli, whether it is natural or un-natural.

Neuroprosthetics could not only one day allow people with lost limbs to replace those limbs, but also may serve as a replacement parts directory for most functions of the human body. [5] Some other examples of the current advances of medical tools are CAT (Computerized Tomography) scanners , MRIs (Magnetic Resonance Imaging), defibrillators (electronic devices that are used to rescue patients who go into cardiac arrest or who are experiencing irregular heartbeats), laser cutters and medical robots. There are many benefits of using medical robots during surgery.

First of all, medical robots require smaller incisions to operate, which typically mean shorter hospital stays, lesser pain, and quicker recoveries. Also, many robots eliminate the problem of hand tremors machines can be calibrated to translate relatively large motions at the controller's console into tiny, ultrafine actions by the instruments. Doctors do not even always have to be in the same room as a patient to operate using a robot. Furthermore, robots limit blood loss in an open procedure it is not unusual for the patient to lose a liter of blood, but robots lessen this amount drastically.

Additionally, robots are more precise, with arms that can rotate 360 degrees. Finally, the robotic cameras offer a clear, magnified view of surgical fields that surgeons often did not see by themselves they had to feel around for the correct parts, because fingers often obstructed their line of sight. [4] You can really see that medicine is advancing rapidly and as it advances more people are saved from diseases and sicknesses, but of course these advances would not have been made because of the previous technology they had before.

In present, medical technology is already well-developed and still is developing. II. Environmental Technology Now, that our world is over populated and our resources are getting smaller, we need to preserve and save our environment. Advances in technology are helping us in doing so. Some parts of the world have a shortage of water supply. Desalination, basically removing salt and minerals from seawater, is one way to provide potable water in those parts of the world. Hydrogen fuel usage has also been experimented as a way to usingpollutionfree fossil-fuels.

With this kind of technology, cars will be running in the streets emitting nothing but clean water. As we all know, the sun is one big ball of energy, and can be converted into heat or electricity. There are two widely known solar collectors, but researchers are pushing the limits to convert the sun's energy into electricity by using mirrors and parabolic dishes. Someday, this technology will be able to create electricity for the whole Earth and will help in preserving our resources. There is also another way to create electricity, and that is by the ocean waves and tides.

People have created turbines to collect the energy from the waters, which can turn this mechanical energy into electrical energy. Carbon dioxide is the most striking greenhouse gas contributing toglobal warming. Researchers are trying to fix this huge problem, and they have thought of a way already. Experts suggest a method that can solve this problem, and it is by injecting the carbon dioxide into the ground before it can reach the atmosphere. [6] Today, it is very clear that man is harming the Earth. Scientists have thought of these ways to stop the harmful practices. These are the emerging nvironmental technologies of the modern world, and these technologies can

save the Earth from doom. III. Gadgets, Home Electronics and Communication Communicating with different people is a great need in the life of a person. Advancements in technology have made it super easy to communicate with people who are near and afar. Gadgets like the cell phone, personal computers, telephones, the Apple Products, etc. are great examples of communication gadgets. The earliest forms of communication are the pictograms, signal, and, of course, language. Communication has advanced so much through the years.

The 20th and 21st centuries have been the most rapid advancement in communication technology. The greatest advancements today is the internet, wireless free internet (Wi-Fi), E-mail, smart phones, andsocial networking. With just one tap of a finger, a message can already go a very long way. [7] The internet is a remarkable technological innovation that represents humanity today. The internet is the world wide, publicly accessible network of interconnected computer networks that transmit data between themselves. The internet is created for the purpose of somehow making the world smaller.

It allows the people all around the globe, in modern day, to interconnect and promoteglobalizationand information sharing. [3] Social Networking is one service from the Internet. Examples are; Facebook, Twitter, Google+, and etc. These social networks provide men and women everywhere means to interact with each other despite the distance between them. They are able to share ideas, have a meeting, chat, and talk with the use of the Internet. With just the internet connection itself and the social network you are able to see different people in your own computer screen, you can also hear them.

You don't need to meet with other people in the real life, because it already feels as if that person is with you at that particular time. With these networks too, you can go online shopping. You can buy things off the Internet and have them shipped to your house the next day. It is so easy to do, and is much affordable because the retailers don't have to pay a rent. You don't need to go outside your house and search for the things you need to buy. With just one click, materials are sold with the use of this technological advancement. Social networking isn't just for these purposes though.

It is also for education. There are actually schools which are online. Teachers and students also use it as a communication tool. Teachers have observed that students are frequently on the net, so they have also familiarized this trend to extend their discussions in chat forums, and to post assignments, quizzes, and tests outside the school. College students also use the Internet to apply for jobs and internships. Many schools have implemented online alumni directories which serve as makeshift social networks that current and former students can turn to forcareeradvice. [8]

Before, people need to fire some wood to cook or heat something up. Now, we have different electronics that can heat something up in seconds. Television sets back then, were large and fat. Now, they're as thin as paper, and the visuals are amazing. Your plasma TV can also be your own computer, how incredible is that? There are also these gadgets called the iPod where in you can enter a thousand songs inside a little device. How can anyone ever expect such a small thing hold so much memory. Tablets like the Apple iPad is somehow like a laptop already. You can download numerous applications in it to use.

You can even make it your own library of books. It is like an all in one gadget, which is very useful to a person's daily life. There are still various gadgets that have been invented, which have made life easier for everyone. In the year 2006, South Korea has invented Robots that say, relay messages to parents, teach children English, and sing and dance for them when they get bored. This developed in the year of 2007. These robots help families in their homes and outside of their homes. If according goes all to plan robots will be in every South Korean household between 2015 and 2020.

This plan will really change the daily habits of man and it can affect the whole world. [9] IV. Occupational/ Career Call centers use a wide variety of different technologies to allow them to manage the large volumes of work that need to be manages by the call center. These technologies ensure that agents are kept as productive as possible, and that calls are queued and processed as quickly as possible, resulting in good levels of service. Call centers have been a huge help in job applications here in the Philippines. Thousands of Filipinos have jobs because of call centers.

This is one branch of technology that has promoted the economy and society to rise. [10] Technology has allowed millions of people in the world to get a job. Buildings, offices, hospitals, malls, schools everywhere involve some kind of technology somehow, and this has opened opportunities for a lot of lives. V. Effects of Technology in the World With the advancement of technology today, it is clear that it has changed the way people live their lives. Filipino families have been reaping the best out of technology in keeping their own families intact.

The Filipinofamilystill embraces traditional values with the family remaining as a person's number one priority. Families have given 10. 9 hours of their day in the consumption of media and 14 hours for technology. Filipinos spend 6. 1 hours with their families and almost 1. 9 hours with their friends while 23. 2 hours are spent for every day essentials like sleeping, school, or work. Technology enhanced Filipinos' Social lives. 76% said that they have friends in different countries and cities because of the internet. Also, 53% said that the technology provided them a platform in overcoming their shyness. 11] The advancements are also accompanied by the reduction in the time, effort, cost, for production of any materials from those tiny microchips to the huge machines or from the modern futuristic devices to the mega structures, they have been made with ease in design and development with the help of technology. These advancements also lead to the development of the economy due to the right use of technology which reduces the material production cost and the overhead charges which create savings and thus starts national development.

When we look at the effects of technological advancement, even though there are a lot of good effects to be named, we must not forget the side effects and risks involved with technological advancement. Making a lot of processes digital does not only increase the comfort of the people using it, it also increases the risk of people being spammed or scammed. [12] Technology can provide us with comfort and ease, but it can make us very lazy as well. The higher risk of being scammed is also something to be constantly aware of. 1. So We Need Something Else for Reason to Mean", International Journal of Philosophical Studies 8: 3, 271 — 295. 2.

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