Question 1: How has technology affected our life, education system, and business? What are some of the benefits and costs of technology?

Technology is one the biggest driving factors behind businesses, countries, and people competing against one another. People cannot perform simple daily tasks anymore without being bound by technology. Technology is integrated into our DNA. People had old ways of determining what direction they were going. Now, society cannot survive without using a GPS. Technology has affected how we communicate with family, friends, and co-workers. We can facetime our family when they are across the world, and it’s like talking to them in person. Technology is advancing the growth of children in school systems. Schools used iPads and computers to teach kids new subjects. Schools used to have students read paperback books. Today, children are only reading on electronic devices. Also, technology now allows students to do distance education courses which enable students from across the country to take different classes and not be limited by a location. Technology is changing the way healthcare is being used by hospitals and patients. Hospitals use to fax medical records to other hospitals because electronic medical records (EMR) did not exist. Technology has advanced so much that a person in North Carolina can go to a clinic in California and have their medical records already in the system. Not only in HealthCare but other corporations are improving in the technology space the because predictive tooling is used to help companies gather analytical data and better predict trends to help business growth.

Question 2: Identify and explain with examples (at least) the three trends of technological development with examples in the global level.

There are a lot of technology trends that corporations all over the world are starting to use. Some of them include digitization, integration, and computing speed (Sterry and Hendricks, 1999). For example, companies such as Apple, Spotify, and Google music all have a global footprint where customers can purchase music online and stream music on the go. Blockbuster and other VHS/DVD companies were run out of business by companies such as HBO, Netflix, Hulu, and Amazon. These companies can let customers stream television shows or movies from across the globe for a monthly fee. The best example of integration across the world is the cloud. The cloud consists of computers in a data center that host information such as healthcare, sports, and websites. A good example of the cloud is Amazon Web Services (AWS) because they host different cloud regions across the world such as Asia, Australia, and the North America (AWS, 2006). IBM is one of the leading technology companies in computing speed. They use a program for analytical data that predicts data faster than humans (IBM, 2010). It picks trends to help corporations predict the best products.

Question 3: Discuss the categories and components of Technology Assessment.

   Tech Assessment is a study that examines how society is affected when new technology is presented to the industry. There are three categories of tech assessment which include project-centered, problem-centered, and new tech-centered assessments (Sterry and Hendricks, 1999). I think a good example of a problem-centered assessment is when technology is created to help global warming. Global warming is a problem, and the technology that's developed is the resolution to the issue. A few components of tech assessments are selecting the TA team, describing the society, and analyzing the impact. When a tech assessment team is selected, the team should define the correct Society for the technology they are assessing. The assessment could be off if the wrong society is chosen.

Ted Talk

The more technology we use, the more data we store and process to enhance technology. Big data helps us process these vast amounts of data so that technology can make our lives better. Kenneth Cukier is the Data Editor of The Economist, and his TED talk is called “Big data is better data” (Cukier, 2014). He was also the co-author of “Big Data: A Revolution That Will Transform How We Live, Work, and Think” (Cukier, 2014). Cukier’s talk was filmed in Berlin, June 2014. At the beginning of his speech, he starts out giving an example that a 36-inch Apple pie was America’s favorite pie. His argument was if the people had smaller slices then they would have more data. The data would tell you that America doesn’t like apple pie as previously indicated. His example proved that with more data, we could derive more about society. Cukier’s talk went over what’s next for machine learning. He gave examples of how big data is affecting technology globally. Some countries are using this data for anti-theft in cars by knowing a person’s fingerprints through aggregating the data. Car companies can datatify driver fatigue to predict when accidents are going to happen. He gives definitions of big data and machine learning which helps users understand the talk. Cukier later gives an excellent example of machine learning. He talks about how an engineer at IBM (IBM, 2010) played checkers against a computer, and they kept winning. After some time, the engineer let the computer play itself. As each game unfolds, the computer collects data and increases the accuracy of the information so it can make predictive moves. Once the engineer comes back, he loses because of the machine learning from the computer. Examples of machine learning are search engines, computer translations, and voice recognition systems. Cukier thought society could be punished for using machine learning. For example, we may have algorithms that can predict what humans are about to do and we may be held accountable for that. He also thinks that big data is going to steal our jobs eventually. He believes that big data will help us transform our lives, but we should be careful how we handle the data that machine learning has presented to society. The presentation was thorough and to the point and thought provoking.

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