Adrian Brown

Professor Nevill

Management Information

28 January 2021

Assignment 01: The Top Three Technology Trends

Out of the ten technology trends picked by Forbes Magazine, there are three trends in my opinion that will significantly influence the way we do business in the future. These trends are as follows: 3-D printing, advanced machine learning and advanced system architecture. My reasoning behind these three trends involves a consideration in efficiency. I believe these three trends provide a greater advancement of efficiency and productivity than we've ever imagined in technological history. They're already starting to create 3-D printed shoes, glasses, and even 3-D printed clothes using vapor fuse surfacing which makes the texture soft and smooth for each article of clothing, whether it be footwear, headgear, etc ("3D PRINTING METAL," 00:00:30-00:17:00). The aspect that makes 3-D printing very efficient lies in the process of modeling every structure in one machine and using mostly the same filling and/or similar filling to shape/construct each model. This way, 3-D printers can form models of just about anything, from 3-D printed shoes (which will most likely be trending in 2050) to 3-D printed prosthetics, and manufacturers are even planning to use 3-D printing technology to enhance AFB tapes for flights and airlines ("3D PRINTING METAL," 00:17:30-00:42:00)! Already we're seeing more efficiency as everything is modeled from one printer. The next trend that will significantly influence the way we do business in the future is advanced machine learning. Advanced machine learning helps perform tasks at an efficient rate, such as distinguishing between a cat and a dog, knowing the difference between an eye from a nose, or even counting how many objects or

repeated patterns exist in an image. After importing and cleaning the data, advanced machine learning allows us to create a model, train that model, make predictions and continuously improve the process to finally conclude the task at hand (Hamedan, 00:00:30-0:22:22). The third trend that will significantly influence the way we do business in the future is advanced system architecture. This is important, because it teaches us that there are many ways to perform a task, but we must choose the most efficient way to perform this task. It's similar to when we first learn multiplication; when we multiply one hundred with two, we can align them vertically and add the digits diagonally and we will get 200, but it's a lot easier to add two zeros after the 2 to get 200. This is what Professor Oliver de Weck from MIT's OpenCourseWare lecture describes as the "Refrigerator Case Study." He talks about how a refrigerator's purpose is to preserve food. He goes on to explain multiple ways to preserve food, including the processes of drying, salting and irradiating, but he concludes that chilling the food is the easiest and most efficient way to preserve food, and this idea goes hand in hand with building a system of code as businesses search for the most efficient way to run technology ("4. System Architecture and Concept Generation," 00:00:30-00:20:00). All of these three trends maintain efficiency, whether it be 3-D printing, whether it be advanced machine learning or whether it be advanced system architecture. Five to ten years from now, I see technology increasing in speed and efficiency, and this can work for good and for evil as more information can be processed simultaneously. While we can communicate to each other very fast and effectively, our privacy is often compromised on social media platforms as they are collecting data from other websites more and more while creating new policies that the user needs to consent to, which is why I'm deleting my Facebook account as I've already deleted WhatsApp and Instagram. We're always faced with privacy concerns, and this is a big issue in technology trends and will be a greater issue five years from now.

Works Cited:

"3D PRINTING METAL and More Awesome 3D PRINTERS at Formnext 2019!" *Youtube,* uploaded by 3D Printing Nerd, 1 December 2019, www.youtube.com/watch?v=82ZZVIl72yE.

"4. System Architecture and Concept Generation." *Youtube,* uploaded by MIT OpenCourseWare, 10 August 2017, www.youtube.com/watch?v=ScbSrUSbumo.

Hamedan, Mosh. "Python Machine Learning Tutorial (Data Science)." *Youtube,* uploaded by Programming with Mosh, 17 September 2020, www.youtube.com/watch?v=7eh4d6sabA0.