Assessment 15: Mentor Visits

Mentor: Priscilla Johnston

Profession: Lead Analyst, Project Management (Supply Planning)

Location: Stryker Flower Mound

Date: 11/14/2023

Time: 4pm-5pm

Assessment: Machine Learning and Amazon's Prosperity

One topic that I found interesting throughout my research about Amazon was machine learning technology. The AWS program that Amazon sells to customers uses artificial intelligence and machine learning to analyze data and make accurate predictions based on this data. This program helps data scientists and business analysts organize data and make decisions without having to write code or having ML experience.

Machine learning is a difficult concept to understand. Machine learning is a type of artificial intelligence that is capable of imitating human behavior.. ML is the process in which machines develop intelligence modeled after humans' process of reasoning and logical processes. Machine learning allows for data inputs to be analyzed like a human would and decisions be made accurately. Because this process is constantly evolving and getting smarter, data analysis and predictions are only going to be more and more accurate. These predictions have helped business analysts make business evaluations like supply and demand trends, fastest transportation, and safety stock.

Combining what I learned about machine learning with my mentor and my previous research on supply chain, I was able to discover more about the applications of machine learning in supply chain. Machine learning specifically supports demand and supply forecasting, typically

making predictions and data analyst more accurate and faster. When used for forecasting, machine learning improves forecast quality, reduces stockouts, lowers safety stocks, and free up planners' capacities. Because planners would no longer have to take time to analyze data points and patterns, their jobs can focus on other essential parts of planning. Many patterns and analysis can be evaluated faster and more efficiently by machine learning, rather than a planner. This calls into question the future of the planning department in a supply chain if machine learning is able to conduct some predictive analysis skills that are essential for supply planners.

Another topic that I was able to learn more about with my mentor was Amazon's agility. Their ability to quickly react to problems and adjust make them profitable and a customer-favorite. Amazon has also found many ways to produce revenue rather than just being a site for purchasing and distributing goods. For example, Amazon has created a huge transportation network and produced their own forms of transportation. Rather than using other companies for cargo space on ships, containers, or planes, Amazon has started creating their own containers and chartering their own cargo ships. Although these containers are difficult and expensive to create, Amazon is able to take more control over their supply chain processes, eliminating any need for a third party organization. This initiative in the transportation aspect shows Amazon's goals to emerge as a logistics and transportation company. Amazon has also succeeded in making their transportation efforts the most efficient. Amazon uses their empty space on trucks to make a revenue and establish themselves as a transportation method in competition with FedEx and UPS. Similarly, the Fulfilled by Amazon program allows third party orders through Walmart, Google, and Ebay to be stored in Amazon warehouses and be shipped through Amazon.