MSCI 432 Project Phase 1

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# Introduction

An existing service organization that is selected for this project will be the previous co-op firm Amazon. The work done here was for a software engineering internship in the summer of 2020 on the Amazon Freight team [1]. Amazon Freight is a shipping service across North America and Europe where a fleet of owned trailers and technology are used to ship full or less than full truckload freight across Amazon’s network. More specifically, this service uses dry haul vans and over trailers and carrier partners to ship the loads at competitive rates and with shipper support. The work done for the internship was the development of an invoice management system to manage and track shipper invoices across the network. For this project, the focus will be on the various operational processes that come with such a service like this, and suggestions will be made to improve upon some of these processes. This section of Amazon’s business is slightly different from what it is most known for, namely that of online retailing, warehousing, and delivery, however, many of the concepts still apply in this case. More specifically, capacity planning, facility layout, quality, supply chain, and circular economy will all be addressed in this project with respect to Amazon Freight, and improvements will be suggested for many of their current processes.

# Problem Statement

As this is a relatively new side of the business, namely that of freight brokerage, there are currently many limitations with this service. The biggest limitation is that it only supports full truckload, and does not support multi-stop shipments, intermodal, ocean, personal shipments, flatbed, LTL, small parcel, residential, drayage, and offer lift gates. As a result, many potential customers are immediately turned away since the service cannot support their type of shipment, hence, a loss of revenue in this case. Moreover, there are some items that cannot be accepted by this service such as hazardous materials (HAZMAT), those requiring refrigeration, and other prohibited goods. Although this is understandable, with respect to safety and the laws, however, this nonetheless is still a decline in revenue due to loss of potential customers. Lastly, the most common logistical issues with this service are the customer support, that is, assisting the shippers when problems occur. The most prominent issues are when the shipments do not arrive on time, or when they are shipped to the wrong location, as there is not much support they can provide.

# Potential Solutions

# Discussion

# Conclusion

# Limitations

# References

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| [1] | Amazon, "Amazon Freight," [Online]. Available: https://freight.amazon.com/shippers. [Accessed 3 March 2021]. |