SCM Game



Semester 4 SCM

Orientation Challenge March 06, 2023.

Student: Andre Sanao

Course: Smart Industry

Table of Contents

Introduction	3
Summary	3
Personal Reflection	
Conclusion	····· ¬

Introduction

The assignment on which this document presents a summary of the actions taken in the simulation. We the operation team must manage a factories supply chain and expand to neighboring countries. We must optimize the revenue gain for 7 days to run a successful company. In the following section will be a summary of the decision and actions taken during the factory operation.

Summary

We started by not changing anything because of previous experience and we wanted to understand how the flow of the simulation work. After understanding the game, we started expanding our factory to Sorange because we wanted each factory to handle 2 countries for example Calopeia factory will be producing for Entworpe and its own and same goes for Sorange and Tyran. We started with the construction a factory and warehouse for Sorange with a capacity of 60 as a start and tune it from there depending on the graph changes in figure 1. Sorange also has the same parameter as Calopeia and the shipping method for both factories will be truck for a cheaper price. We started with low value with the warehouse parameters for Entworpe to be on the safe side and increasing it from there for tuning.

Demand for each destination region.

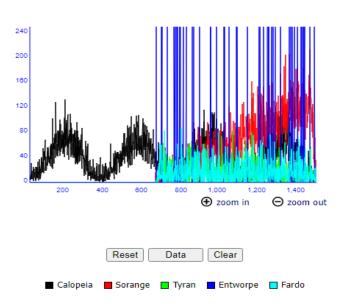


Figure 1 Demand in each region

We decided to leave out Fardo because of a few reasons which is the fulfillment cost is expensive and we do not have enough time to tune the parameters after the constructions are finished. We didn't want to risk it and stayed on the safer side due to limited time. We are earning around 10-20K cash per day and we did not want to lose that momentum and as you can

see in figure 2, our cash balance is rising with the factories and warehouse we built. In the end we did not lose a lot of demands except for Fardo.

Plot of cash balance (thousands of dollars)

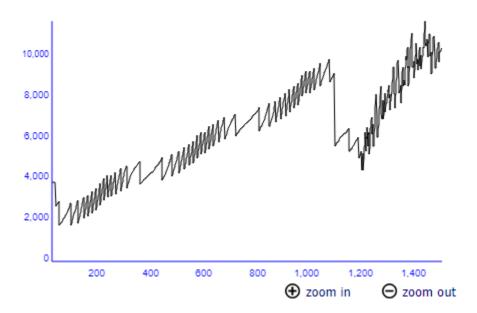


Figure 2 Headquarter cash balance

Personal Reflection

In this assignment, I offered the team some solution and predictions of what would happen if we made some drastic changes. Compared to the last assignment, I think I improved in communication with the team and did not hesitate to voice out my opinions. As a result we managed to at least get 8th place in the overall team standing. I ensure that the team understands my solutions and offered changes and it got the factory to where it is now.

Conclusion

To conclude this report, compared to our previous simulation, we as a team did better and not make any major changes. However, we lost cash because we didn't make any changes for a few days. If we started constructing warehouses when the game started, we could have made a factory and warehouse for Fardo. At the end of the day we still made positive cash and not expect to climb in the team standing.