

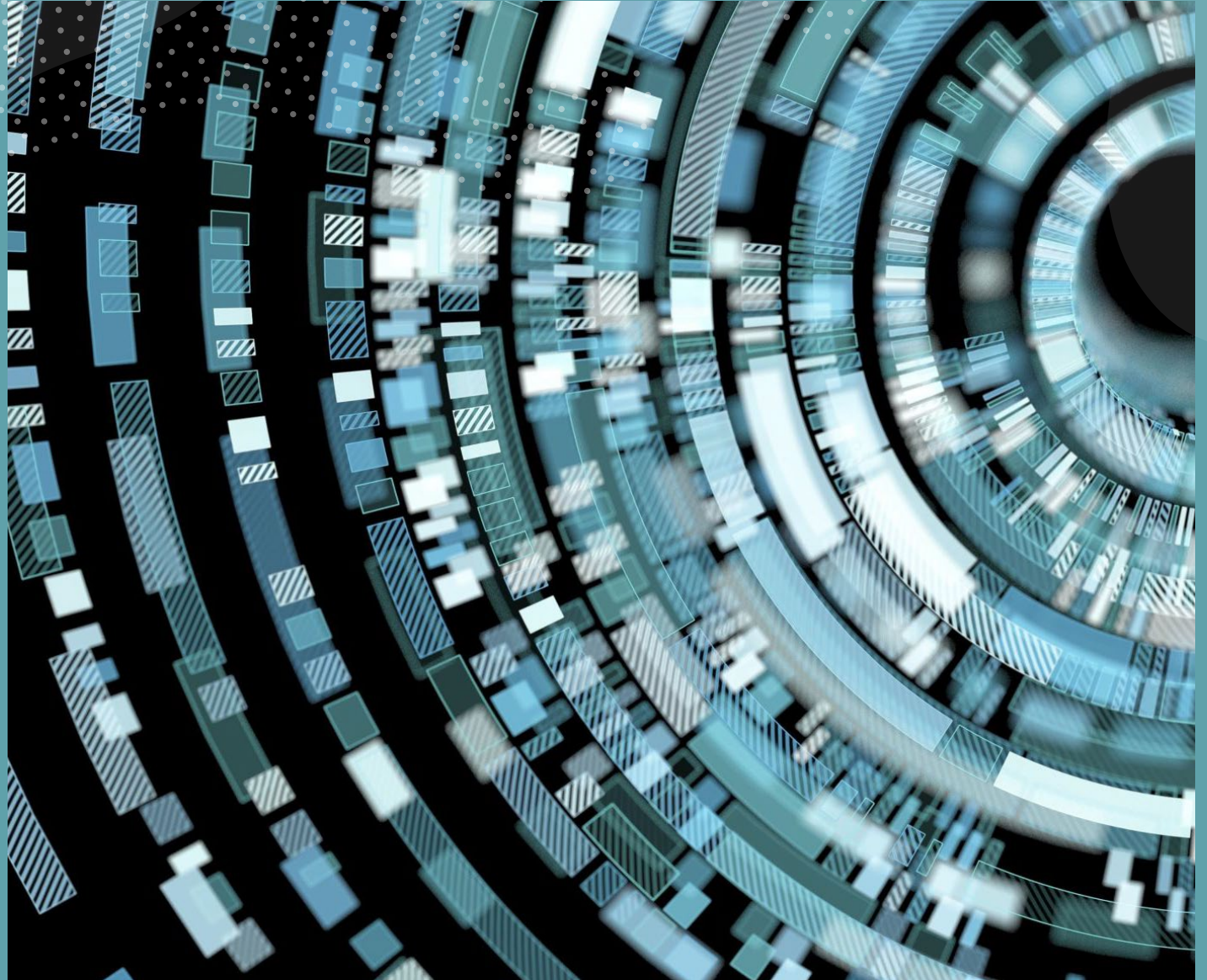
ERPsim Analytics

Team: GG

CIS 3200

May 9, 2023

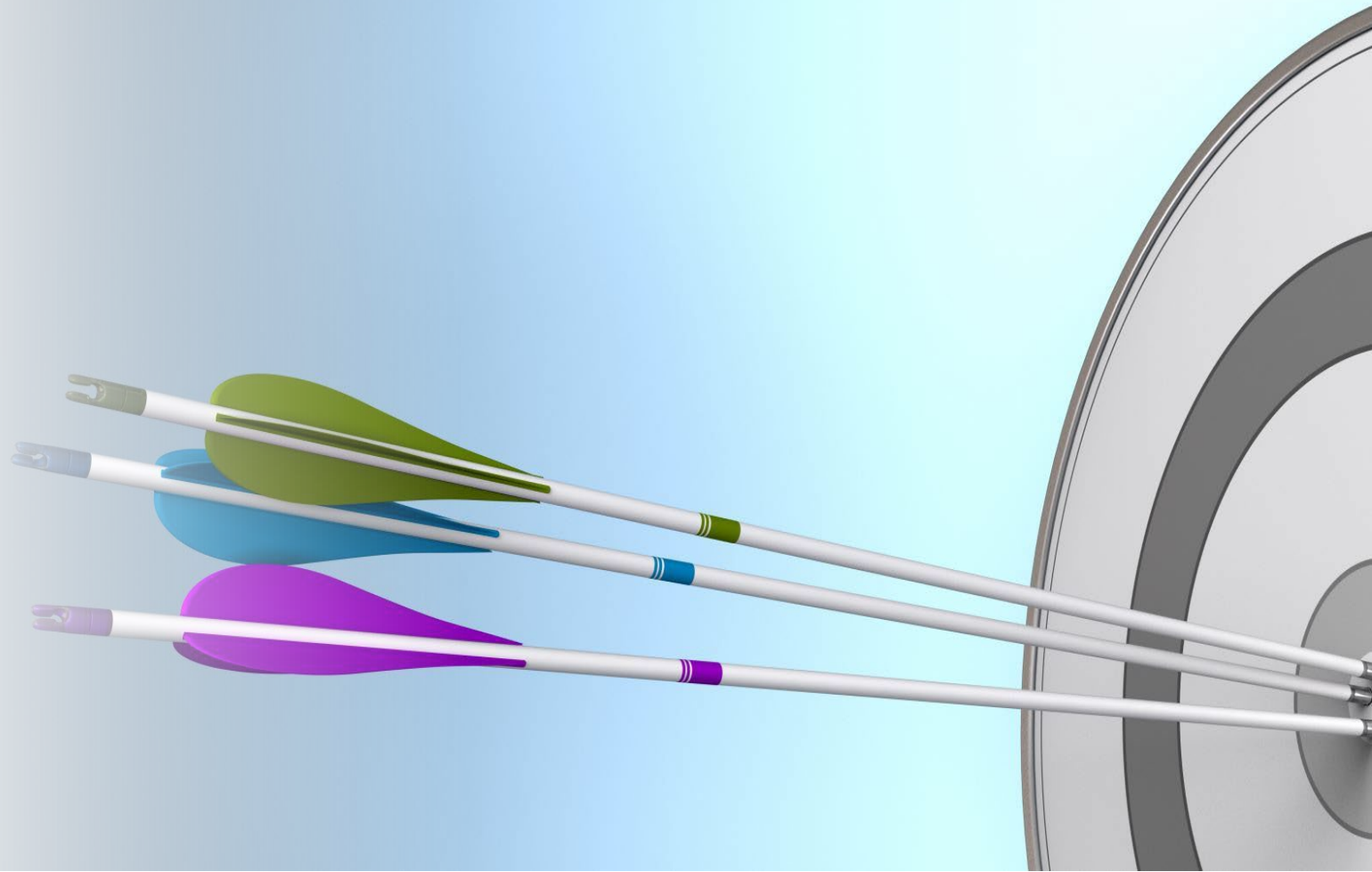
Dr. Wang



Objectives/Goals

Business Objectives:

- Evaluate business performance in each department by analyzing historical data.
- Analyze various business processes to identify areas of improvement and increase the company's overall evaluation.



Planning Manager – Xavier Colin



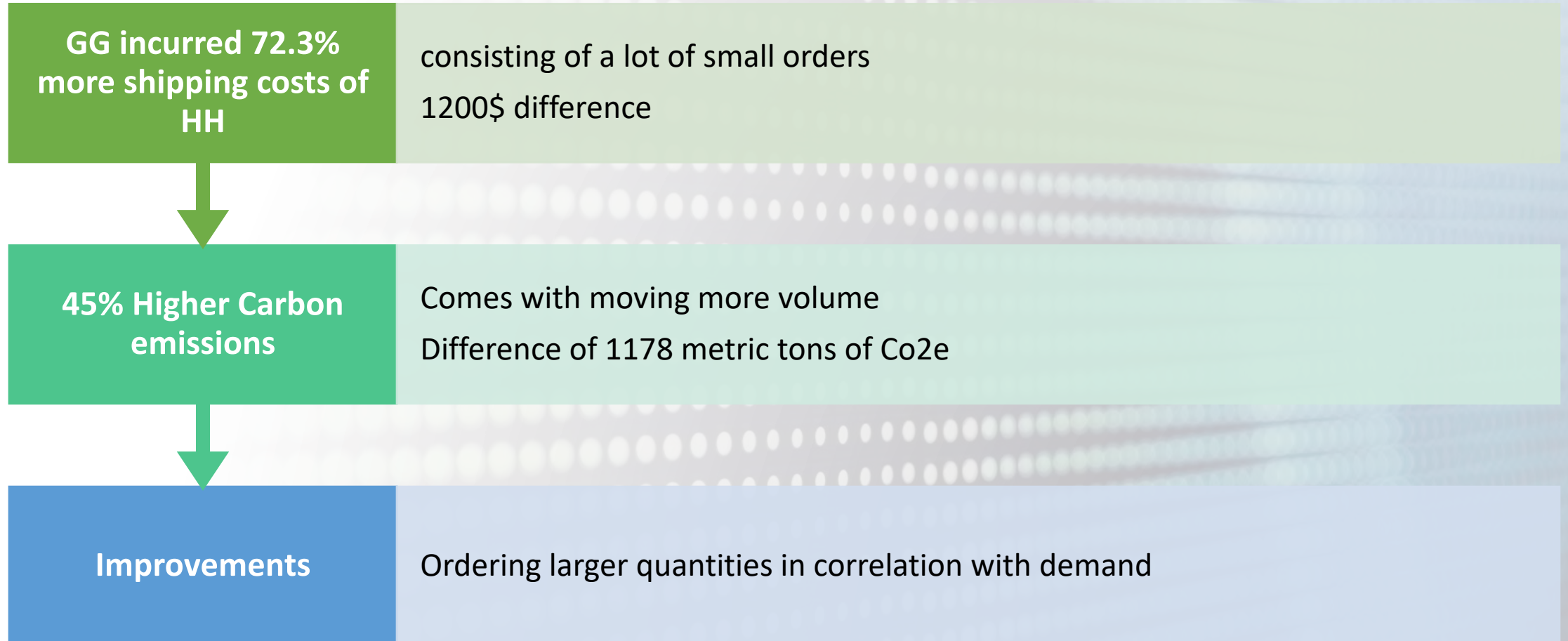
Goals:

- The main goal of our department is to make sure that the inventory level stay at a minimum to provide materials to customers.

Tasks:

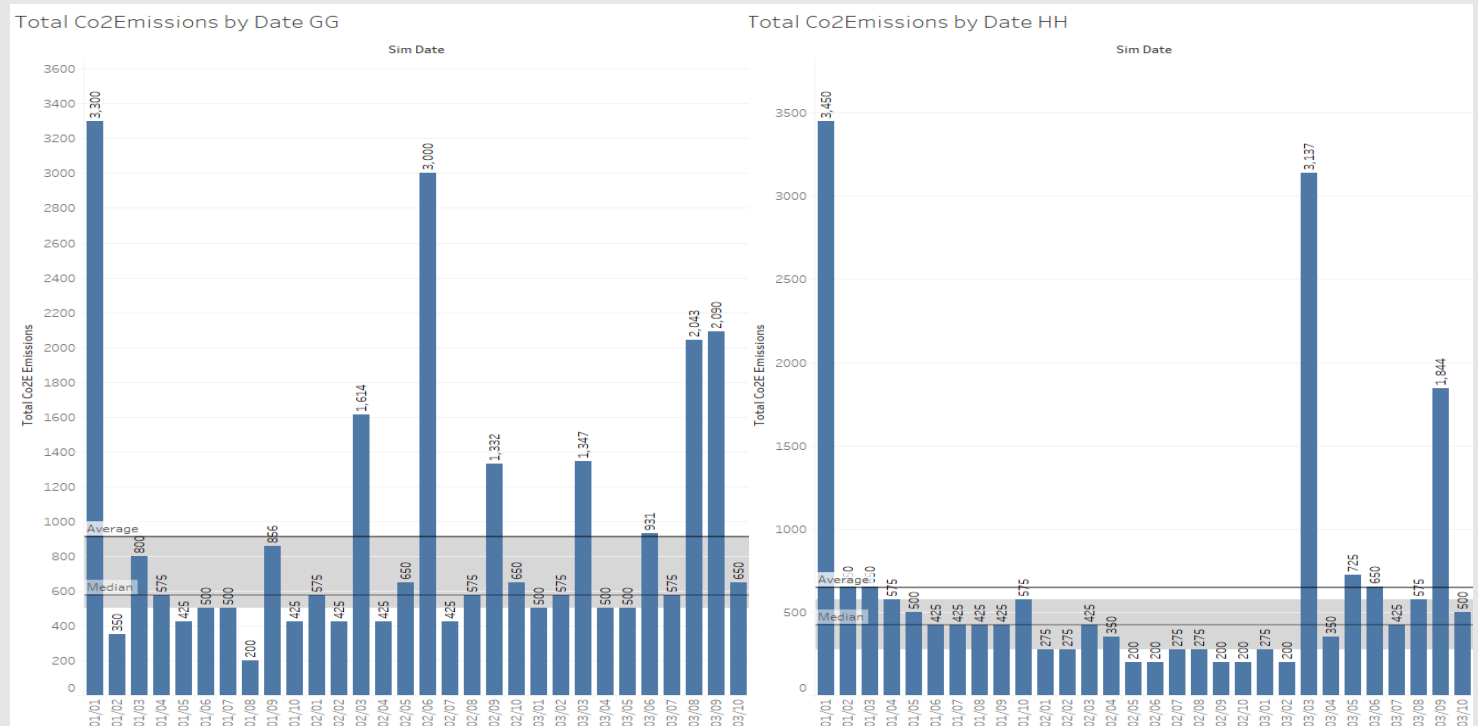
- Creation of Requirements
- Create a purchasing plan
- Track material delivery
- Adjust Material Plans over time

Planning Manager Findings – Alan To



Data Analyst Findings – Tim Tran

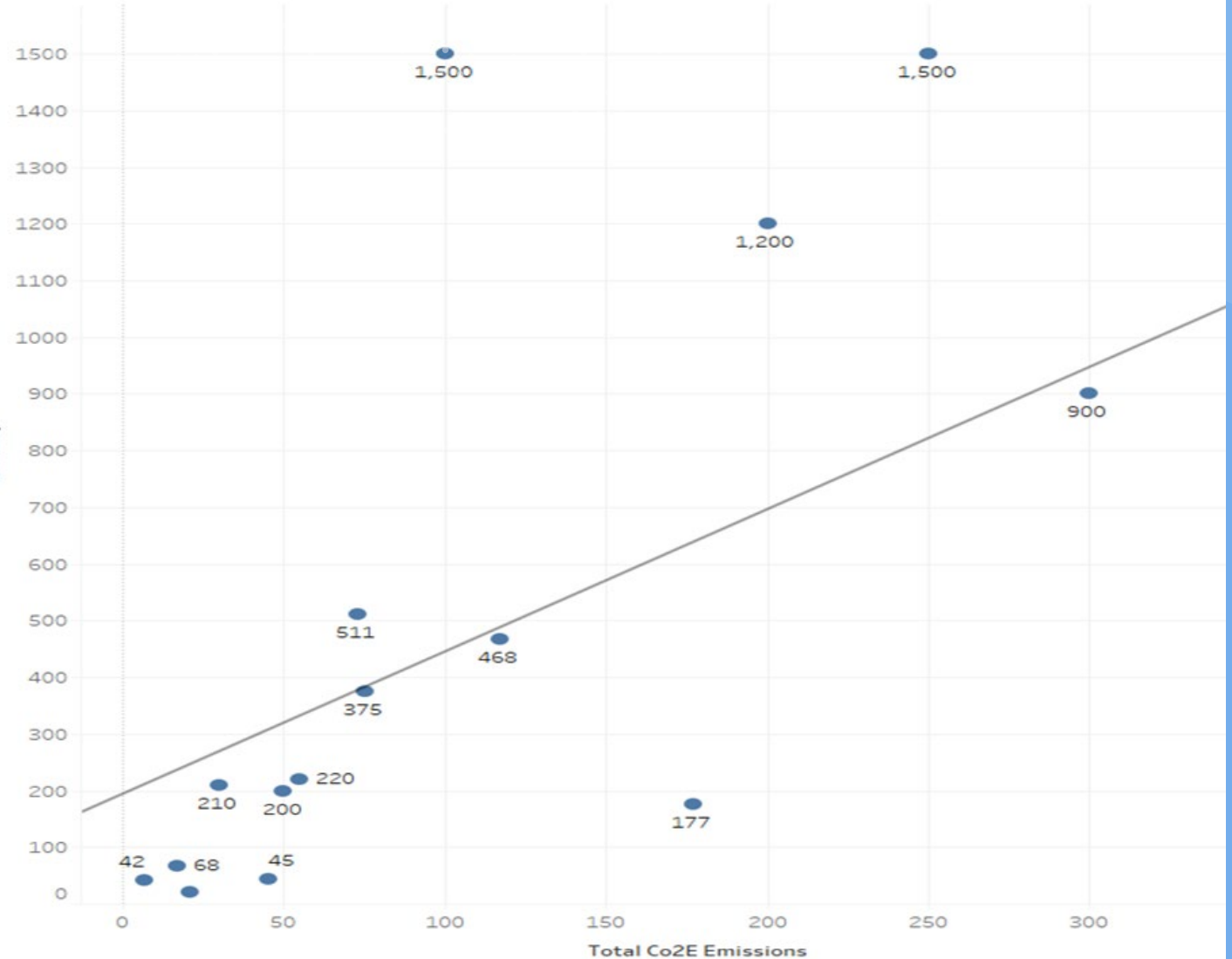
- The bar chart shows the total Co2 emissions generated by company GG and company HH.
- It Is found that company GG has higher average and median of Co2 emission compared to company HH.
- The visualization can provide insights into part of the overall performance of the company and how we must lower our Co2 emission in order to increase the company's overall evaluation.



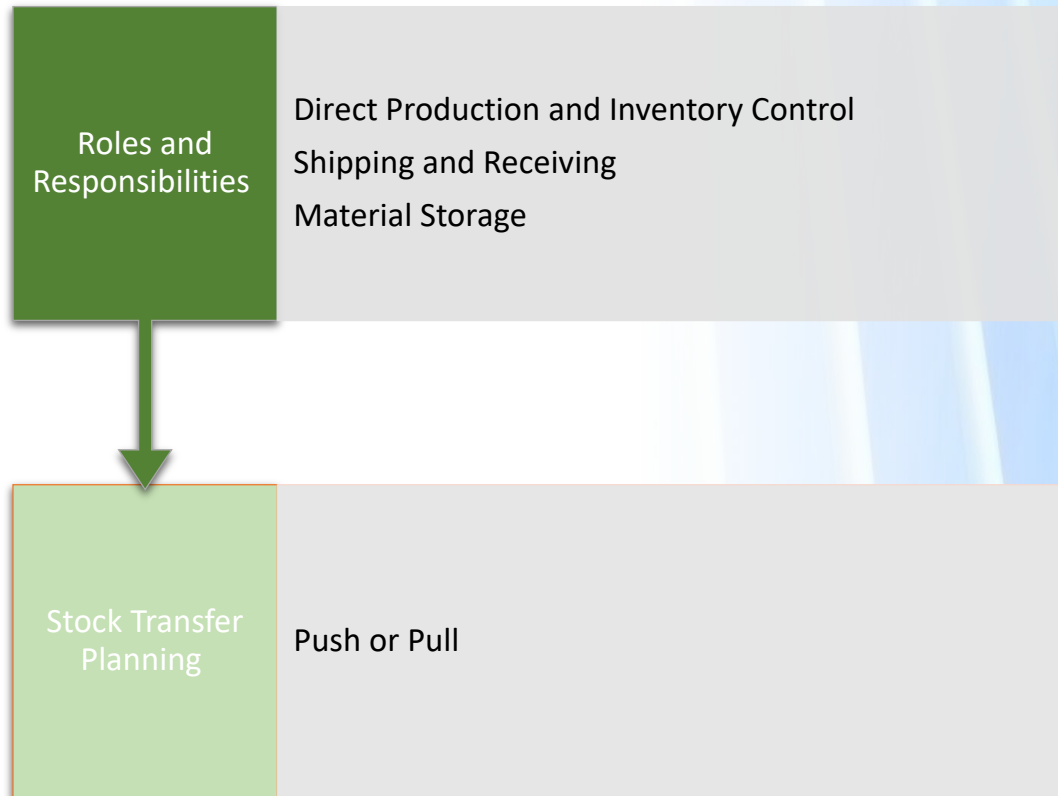
Data Analyst Findings – Tim Tran

- The visualization shows a positive correlation between the quantity of stock transfer and energy emissions.
- The result could have significant implications for the organization's strategic goals.
- The result can provide valuable insights into ways the company can implement to be more energy efficient through refining inbound and outbound shipments.

Total Co2 Emissions by Number of Stock Transfer

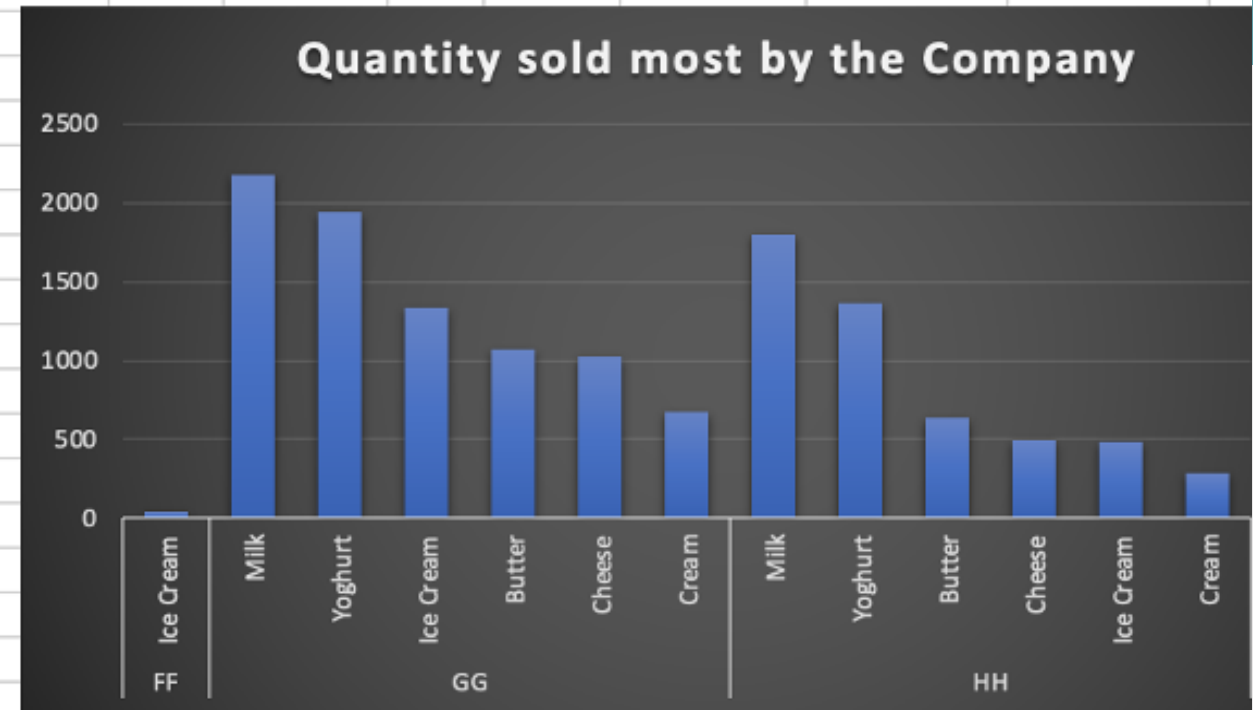


Material Management – Uraja Lad



Company Sold The Most Quantity? - Lucinda Le

Row Labels	Sum of QUANTITY
FF	41
Ice Cream	41
GG	8213
Milk	2177
Yoghurt	1944
Ice Cream	1332
Butter	1067
Cheese	1020
Cream	673
HH	5063
Milk	1798
Yoghurt	1366
Butter	631
Cheese	496
Ice Cream	482
Cream	290
Grand Total	13317



Material Management (During the Game) - Franco Romani

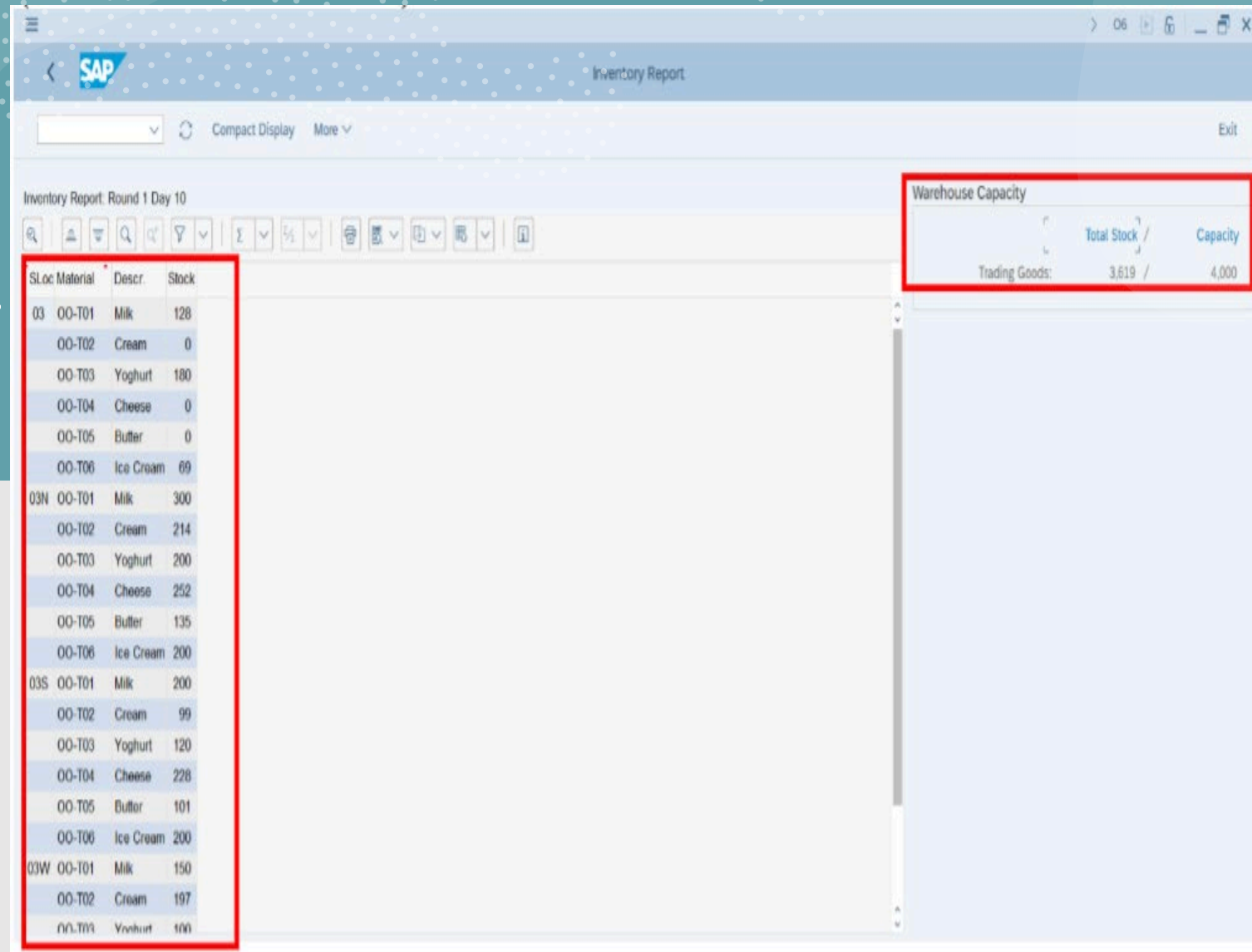
- During the game, it was the Material Management's responsibility to plan the stock transfer between all the branches.
- As shown in the figure, each plant needs to keep inventory in stock in order to keep selling.
- Changing the planning mode from push and pool had an effect as well since pull mode would try and keep up with existing orders/current demand, whereas push planning would anticipate customer needs.

The screenshot shows the SAP Material Management interface. At the top, there is a search bar and a 'More' dropdown. Below this, the 'Planning Mode' section has two radio buttons: 'Push' (selected) and 'Pull'. The 'Scheduling' section has a dropdown set to '1 days'. Below these settings is the 'Allocation Plan' table, which lists materials and their descriptions, and shows stock levels for North, South, and West branches. The table is highlighted with a red border.

Material	Description	North	South	West
OO-T01	Milk	300	250	250
OO-T02	Cream	200	200	200
OO-T03	Yoghurt	200	200	200
OO-T04	Cheese	200	200	200
OO-T05	Butter	200	200	200
OO-T06	Ice Cream	250	300	250

Material Management (During the Game) - Franco Romani

- While making sure stock inventory is being sent to the right places, as part of material management we found ourselves constantly refreshing the inventory page to make sure things would keep running smoothly and not let inventory go to zero.



The screenshot shows the SAP 'Inventory Report' window. The main table lists inventory items with columns for Stock Location (SLoc), Material, Description (Descr), and Stock quantity. The table is divided into sections for different locations: 03, 03N, 03S, and 03W. A red box highlights the first column (SLoc) and the first two columns (Material and Descr) for the first section (03). Another red box highlights the 'Warehouse Capacity' summary table on the right, which shows 'Total Stock' and 'Capacity' for 'Trading Goods'.

SLoc	Material	Descr	Stock
03	00-T01	Milk	128
	00-T02	Cream	0
	00-T03	Yoghurt	180
	00-T04	Cheese	0
	00-T05	Butter	0
	00-T06	Ice Cream	69
03N	00-T01	Milk	300
	00-T02	Cream	214
	00-T03	Yoghurt	200
	00-T04	Cheese	252
	00-T05	Butter	135
	00-T06	Ice Cream	200
03S	00-T01	Milk	200
	00-T02	Cream	99
	00-T03	Yoghurt	120
	00-T04	Cheese	228
	00-T05	Butter	101
	00-T06	Ice Cream	200
03W	00-T01	Milk	150
	00-T02	Cream	197
	00-T03	Yoghurt	100

Warehouse Capacity	
Total Stock	Capacity
Trading Goods: 3,619	4,000

Sale Distribution Initial Strategy

Use the chart to get a clear idea

Found which items sold fastest

Changed prices based on the first round

Communicated with teammates

Changes in SD through the Simulation

Changing the prices throughout the process by:

- Looking at the Summary Sales Report
- Looking at the Detail Sales Report
- Looking at the Inventory Report

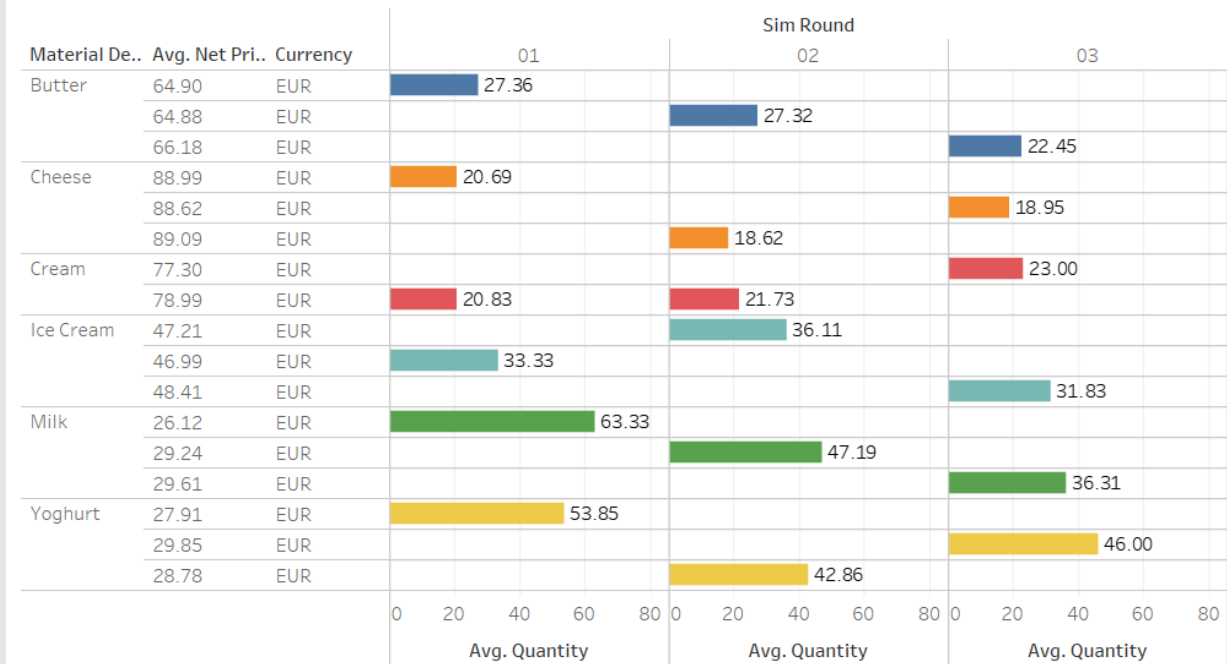


125,058	154,568	95,054	124,500
125,487	56,845	97,511	125,000
124,000	110,000	99,011	154,000
105,450	150,000	99,216	95,000
86,502	35,000	101,090	154,200
	83,000	101,684	110,000
	45,000	101,962	89,000
		102,747	50,000
		102,747	68,000
		102,747	12,000

Results of Sales Distribution Strategy

- This figure shows the average quantity of products that was ordered per round at our set price points.
- For our company, milk (on average) had the highest quantity ordered throughout the simulation. Yoghurt was the 2nd most ordered item for our company.
- While cheese had the lowest quantity ordered throughout the simulation for our company.

Average Quantity of Products sold per Round by Company GG



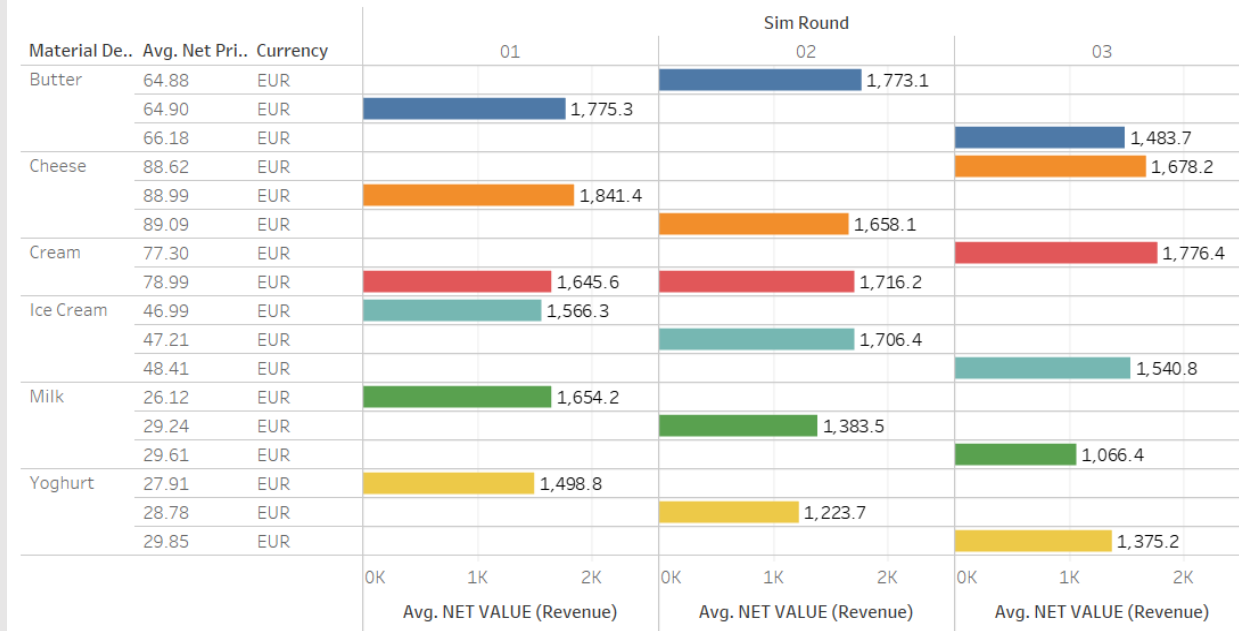
Material Description

- Butter
- Cheese
- Cream
- Ice Cream
- Milk
- Yoghurt

Results of Sales Distribution Strategy (cont.)

- This figure shows the average revenue of products that was generated per round at our set price points.
- We found that cheese performed significantly better revenue wise than milk which was the most ordered product at our company.
 - This was due to the lower price, our company charged for milk compared to the high price charged for cheese.
- Yoghurt also followed this same trend and produced the 2nd lowest revenue while being the 2nd more ordered product for our company.

Average Revenue of Products per Round by Company GG



Material Description

- Butter
- Cheese
- Cream
- Ice Cream
- Milk
- Yoghurt

CEO Findings: Arin

Were there any challenges when running the game?

Understanding the correlation between price and sales

Strategizing when to restock and what is the best price for each item



How was communicating between different roles?

Gathering up to date info between days was the most difficult

Communicating between roles on financial strategy

CEO Findings: Esdras

Are you
satisfied
with the
results of
each
round?

From the results of multiple rounds yes, we are satisfied but there are things to work on. For example, It would have been beneficial for us to adjust our prices based on our inventory levels, either raising or lowering them as needed, to account for the delay in restocking. This approach could have helped us offset the lead time required for resupplying our stock.

What
would you
do
differently
next time?

To improve our performance in the game, we could have taken a more proactive approach and improve our communication and coordination among our sales, materials planning, analytics, and distribution teams. This would have enabled us to establish greater control over these critical areas of our operation.

Thank You

