6. Summary:

i. Initial Operation Strategy:

We had three main strategies throughout the game.

- Cost optimization
- Inventory Management
- Effectively used Pull and Push

Cost Optimization:

- We calculated the profit margin and priced all our products with cost-effective strategies by gross margin of between 12-13%.
- We paid attention in reducing the Operational costs of products, which really helped us to win the game.

Inventory Management:

- By monitoring the inventory report, we forecasted our most selling product and reordered it in advance to avoid out of stocks.

Effectively used Pull and Push:

- By constant checking on the stocks, sales report, we effectively made choices between Push and pull Technique for the stock transfer.

ii. Consequential issues irrelevant to your operations strategy:

Like other teams, we didn't face any of login issues, so we are lucky in way, but our Purchase Planning Manager faced a device issue (laptop) during the game, it was unexpected issue and the CEO pitched in and guided to make the purchase order on time, because without creating the purchase order at correct time would make us to lose the game. Without purchase order, we cannot get the stocks to Inventory, and we cannot make sales. We had co-ordination and proper communication in the team during the entire game, which helped us to win the game. Everyone worked and listened to each other's strategy and executed well on the final game day. Our team was fully co-operative with each other, we had clear communication, and the strategies were clearly communicated to all the team members on how we are going to play the game. The breakout zoom-meetings really helped us to connect with each other and perform better in the game. All these factors helped us to win the game.

iii. Summarize the business data of the enterprise based on analytics:

Based on the performance in the ERPsim Logistics Game, the enterprise is performing well financially. The company has a net income of $39,456.56, gross margin of 13.907%, and ROE of 7.314%.
Overall, the enterprise is performing well financially in comparison with other teams. The company is generating profits efficiently and has a strong financial position.

Here are some specific observations from the daily price change analytics:
Cheese: The price of cheese is the mostly stable. It slightly increases in round 3, then drops at the end of round 3. In round 3 demand may have decreased for the product.
Butter: The price of butter also increases in round 3, but to a lesser extent than cream. The price then remains stable in round 3. The demand for butter is constant in all rounds.

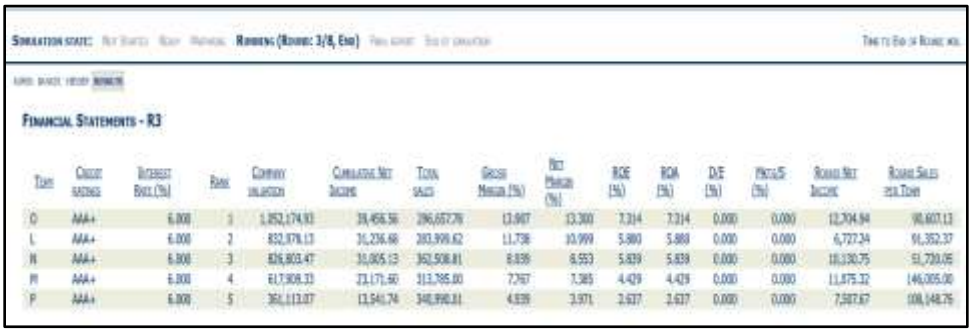
Milk: The price of milk is the most stable of all the products in the first two rounds, with only a tiny increase in round 3 and then decrease.
Yoghurt: the most stable of all the products, with only a small increase in round 3.
Ice cream: The price of ice cream increases slightly in the start of round 3, but then decreases slightly in the half of round 3. So, this product was in constant demand during all 3 rounds.
Cream: The price of cream slightly decreases in round 1 and then bounces back in round 2. The price of cream is the most volatile of all the products in round 3, with a significant increase followed by a significant decrease. This may be due to changes in the supply or demand for cream during the game.
Overall, the prices of the different products in the ERPsim Logistics Game are relatively stable across the three fluctuations.

iv. Correlation between Price and Profit:

There are a linear and positive regression correlation exits between Price and Profit. We priced our product at **13.9% of gross margin** and our interest rate is 6% with ROE is 7.3% and ROA 7.3% which is high compared to all other companies. All these factors and calculation, strategies used to price the product the yield us the Net income 12,704.94 euros which raised our company valuation and made us to Win the game.
With the increase in Price, there is increase in Profit. From figure 6 and 6.1 we can see that there positive sign of the coefficient suggests a **positive linear relationship** exists between the Price quoted and revenue earned during the game.

From the previous experience in simulation game, we understood that if we keep the gross margin between 10 - 13% we can be in top 3. So, we followed this strategy and won the game.

v. The winning team's performance data and explanation on profit results:



Our team O is the winning team.

Here is Team O's performance:

Team	O
Credit Ratings	AAA+
Interest Rate (%)	6
Rank	1
Company Valuation	1,052,174.93
Cumulative Net Income	39,456.56
Total Sales	296,657.78
Gross Margin (%)	13.907

Net Margin (%)	13.3
ROE (%)	7.314
ROA (%)	7.314
D/E (%)	0
Mktg/S (%)	0
Round Net Income	12,704.94
Round Sales per Team	90,607.13

The winning team had a very strong performance across all metrics. They had a credit rating of AAA+, a cumulative net income of $39,456.56, and a total sales of $296,657.78. They also had a gross margin of 13.907%, a return on equity (ROE) of 7.314%, and a return on assets (ROA) of 7.314%. Their marketing/sales (MKTG/S) ratio was 0.000%, and their round net income was $12,704.94. Their round sales were $90,607.13.

The team's profit results can be explained by their strong performance in all areas of the business. They had a high ROE, ROA, and gross margin, which indicates that they were able to generate profits efficiently. They also had a low MKTG/S ratio, which indicates that they were able to generate sales without spending a lot on marketing. Overall, the team's strong performance in all areas of the business led to their victory in the ERPsim Extended Logistics Game. The winning team's performance was significantly better than the other teams in the game. They had the highest cumulative net income, gross margin, ROE, and ROA. They also had the lowest MKTG/S ratio. The winning team's success can be attributed to several factors. They were able to keep their costs low, generate high sales, and make sound financial decisions. They also had a strong team that was able to work together effectively.

Overall, the winning team's performance was outstanding. They were able to outperform the other teams in all areas of the business, and they were a deserving winner of the ERPsim Extended Logistics Game.

vi. Company's new strategy for upcoming games:

We focused on inventory, profit margin, but we didn't concentrate on selling more products. In upcoming games, we must focus and make new strategy on pull and push technique to sell more products. If we have good plan on selling more product, our revenue, and total sales will also be high which will increase the winning chance.

Conduct thorough market research to identify trends and implement strategies to sell more products in the simulation games. The company can develop a comprehensive strategy that not only considers financial factors like inventory and profit margins but also emphasizes the crucial aspect of selling more products.

vii. The relationships that exist between operations factors:

These relationships play a crucial role in shaping the overall performance and success of a company.

1. **Inventory Management and Production Planning:**
    - **Efficient inventory management** ensures the right amount of raw materials and components are available, preventing shortages and delays in production.
    - **Effective production planning** determines the required inventory levels, avoiding overstocking and unnecessary costs.
2. **Sales Performance:**
    - **High production efficiency** enables shorter lead times, increased customer satisfaction, and potentially higher sales.

- **Strong sales performance** influences production planning and resource allocation, ensuring alignment with customer demand.

3. Quality Control and Cost Management:

- **Rigorous quality control measures** minimize defects, reduce warranty costs, and maintain customer satisfaction.
- **Effective quality control** identifies areas for process improvement, leading to cost savings and increased efficiency.

4. Sales Strategy:

- **Customer-centric sales strategies** tailor sales approaches to specific customer segments, increasing sales success.
- **Data-driven sales strategies** adapt to market trends and demand patterns, enhancing sales effectiveness.

viii. The operation strategies for success based on analytics:

key operation strategies for success based on analytics.

Forecast demand and optimize inventory: Use data to predict customer demand and avoid stockouts or overstocking.
Plan and schedule production: Use analytics to schedule production efficiently and meet customer demand on time.
Manage supply chains and mitigate risks: Use data to identify supply chain issues and avoid disruptions.
Control quality and prevent defects: Use analytics to identify and prevent product defects.
Optimize maintenance and asset usage: Use data to predict equipment breakdowns and schedule maintenance efficiently.
Allocate resources and plan capacity: Use analytics to use resources effectively and meet production goals.
Analyze customer behavior and optimize sales: Use data to understand customer preferences and target sales efforts effectively.
Improve processes and reduce costs: Use analytics to identify inefficiencies and streamline processes.
Monitor operations in real time: Use data dashboards to track key performance indicators (KPIs) and make quick decisions.
Use predictive analytics to manage risks: Use data to anticipate problems and take proactive measures.

ix. Best practice for day-to-day operations:

a) Focus Team Effort- Maintaining team dynamics is a vital priority. The finest outcomes may be attained by constant team goal realignment and reevaluation that is enthusiastic, proactive, and productive.

b) Inventory Management – Maintaining an inventory of goods that consumers want and can afford. It also aids in the organization's ability to keep accurate inventory records at all times.

c) Performance Measurement- the goal is to attain a certain income target by practical and manageable methods, assisting companies in implementing attainable results.

d) Streamline/production – One of the most important factors is to alter and adapt with time, putting a greater emphasis on new tools, equipment, and methods of enhancing output.

e) Analytical/Aptitude skills- Involves risk assessments to pinpoint difficulties in adverse circumstances when starting new initiatives.

x. Conclusion:

The most important thing we gained from this process was to improve communication and teamwork. Having in-person project meetings helped us increase the team's focus and comprehension of the simulation. The team quickly convened and strategized on purchasing, material management, and price strategy, as well as fulfilled tasks such as agility sprint and milestones. Everyone involved was given instructions by the team in charge, and the tasks were completed using a work breakdown structure theme.

Another important lesson was the price fluctuation. Using SAP predictive analytics helped us understand how our clients reacted to the price change and how it affected the amount sold. To sustain market share, we should not modify the price by more than 10%. We discovered that increasing the price barrier too much influenced sales volumes. Even though we did not have the biggest sales of any team, the team members' coordination enabled us to win.