

""The Lumina Story Lumina is a rapidly growing startup focused on delivering sustainable, high-quality products to its customers across various regions. With a strong emphasis on efficient operations, supplier relationships, and customer satisfaction, Lumina has carved out a niche in the competitive market. Anna, a logistics manager at Lumina, plays a crucial role in overseeing the company's supply chain. She collaborates closely with suppliers like EcoSupplies and GreenTech to ensure that Lumina's products are consistently in stock and delivered on time. Lumina maintains contracts with several suppliers, each playing a distinct role in the company's operations. EcoSupplies is Lumina's top supplier, known for its reliability and timely deliveries. Lumina's contract with EcoSupplies is valued at \$500,000 per year, making it the highest among all suppliers. In contrast, GreenTech frequently experiences delays due to adverse weather conditions, prompting Anna to renegotiate their contract with stricter penalties for late deliveries. Lumina operates five warehouses strategically located across different regions. The North Warehouse stands out as the most efficient in stocking and delivering products, with minimal stockouts and delays. However, the South Warehouse often struggles with stockouts, particularly for products like EcoBag and GreenBottle, largely due to supply chain disruptions caused by weather. Weather plays a significant role in Lumina's operations. For instance, the Midwest Warehouse frequently faces delays due to snowstorms, which impacts delivery times to stores in that region. To mitigate this, Anna has started stockpiling products in the Midwest before the winter season begins. Lumina's stores are located in various urban and suburban areas. The Downtown Store consistently ranks highest in customer satisfaction, with a rating of 4.9 out of 5. This store is managed by Carlos, who excels at maintaining optimal inventory levels and ensuring popular products like EcoBag are always available. Sales at Lumina peak during the holiday season, especially in the West Coast Region. Products like SolarLantern and EcoBag are top sellers during this period. To prepare for the holiday rush, Anna prioritizes stocking these products in the West Coast warehouses. Major holidays like Christmas and Thanksgiving have a significant influence on Lumina's sales trends. During these holidays, sales double, particularly in high-foot-traffic areas like the Downtown Store. The SolarLantern sees the highest sales during these periods, making it a key product for Lumina. Carlos's excellent management extends beyond the Downtown Store; he also oversees the Central Warehouse, which, under his leadership, has maintained a 98% in-stock rate, even during peak seasons. However, not all warehouses are as efficient. The East Coast Warehouse often faces disruptions due to hurricanes, which impact both product availability and delivery times. To address this, Lumina has started shifting some inventory to the North Warehouse during hurricane season. The location of a store significantly impacts its performance. The Uptown Store, located in a busy urban area, consistently outperforms other stores in sales and inventory turnover. This has led Lumina to consider opening new stores in similar high-traffic locations. In strategic planning, Lumina has identified the Southeast Region as a high-potential area for opening new stores. Based on customer purchase patterns, the company plans to launch a new store in Atlanta next year, focusing on sustainable products like GreenBottle and EcoBag, which are in high demand. Lumina's strategic plans also include renegotiating contracts with GreenTech, focusing on improving delivery times and ensuring product availability. The new contract will include stricter penalties for delays, as well as incentives for on-time deliveries. Finally, Anna has begun analyzing

the impact of various external factors, such as economic events and holidays, on overall sales trends. This analysis has revealed that Lumina should prioritize stocking products like SolarLantern and EcoBag during the holiday season, as these are the top sellers."""