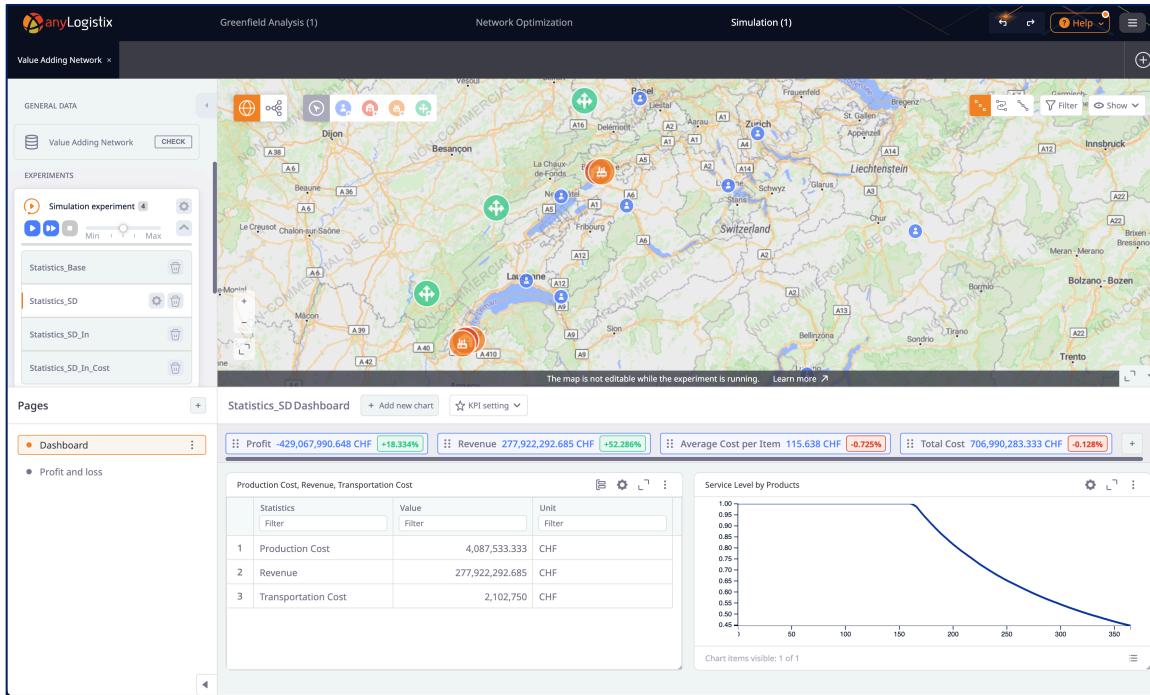


Modeling Demand Uncertainty in anyLogistix: Video Guide & Learning Objectives



YouTube Video Link: <https://youtu.be/AeVWRknorY0>

- To improve your viewing experience, you can access the YouTube settings and enable English subtitles and adjust the video quality to HD.
- The video was created using a specific version of anyLogistix, and some interface elements, such as adding charts or tables for simulation results, may have changed in later versions. These changes are minor, and the updated steps should be intuitive.

1. Purpose of the Video

This video demonstrates how demand fluctuations impact service levels in a supply chain and explores strategies to mitigate these effects. The scenario begins when a supply chain analyst receives a report from the Marketing & Sales team indicating a significant increase in demand. However, the exact quantities remain uncertain, introducing randomness into the demand. The video focuses on two key aspects:

- **Demand Fluctuation Impact:** Examining how variations in demand affect the service level of the supply chain.
- **Mitigation Strategy:** Modifying the inventory parameters to determine how to mitigate the adverse effects of demand fluctuations on network performance.

2. Key Learning Points

By watching this video, you will learn:

- **Demand Fluctuation Impact:** Modeling demand fluctuations and examining how changes in demand influence service levels and overall network performance.
- **Inventory Policy Adjustments:** Testing inventory parameters to find the best settings for balancing cost and service level.
- **Decision Making:** Using simulation analytics to compare different scenarios and make data-driven decisions for supply chain resilience.

3. Exercise Questions

After watching the video and practicing the case, take some time to reflect on your learnings and answer the following questions. Be prepared to discuss your answers during the next lab session:

- **Application:** Explain a real-world situation where demand might fluctuate and how to determine the demand distribution. What if the distribution does not fit predefined distributions in anyLogistix?
- **Demand Distribution:** What is the impact on service level if the demand pattern changes to a Normal Distribution with the same average (15) and a standard deviation of 5?
- **Mitigation Strategies:** What are the less costly mitigation strategies compared to increasing initial stocks when facing demand uncertainty?