## Case Study: "StyleThread" Apparel Retailer

StyleThread, an online and brick-and-mortar clothing retailer, faces a significant challenge: its inventory levels are fluctuating dramatically. When there is a small increase in customer demand for a particular product, the company finds itself with an overwhelming surplus of that item in its warehouses, while simultaneously experiencing shortages of other popular items. This leads to high carrying costs for excess inventory and missed sales opportunities due to stockouts. The company's supply chain involves suppliers, three distribution centers (DCs), and a network of retail stores. The problem appears to be amplified as orders are placed, with increasing order sizes for the same product as they move up the supply chain from the stores to the DCs and then to the suppliers.

## **Questions:**

- 1. What phenomenon is described by the increasing oscillation of inventory levels as it moves up the supply chain from retailers to suppliers, often disproportionately large compared to the initial change in customer demand?
  - a. Just-in-Time (JIT) delivery
  - b. The Bullwhip Effect
  - c. Supply Chain Integration
  - d. Collaborative Planning, Forecasting, and Replenishment (CPFR)
- 2. What is the primary consequence of the Bullwhip Effect for a retailer like StyleThread?
  - a. Improved demand forecasting accuracy
  - b. Reduced lead times for product delivery
  - c. Higher holding costs for excess inventory and missed sales due to stockouts
  - d. Enhanced collaboration between supply chain partners
- 3. Which of the following would be a strategic step StyleThread could take to mitigate the Bullwhip Effect?
  - a. Increase order sizes for all products to reduce ordering frequency
  - b. Eliminate all communication with suppliers
  - c. Implement a point-of-sale (POS) system to provide real-time, shared demand data
  - d. Shift from a push system to a pull system with orders initiated only by customer demand
- 4. By sharing real-time sales data from their POS systems, StyleThread aims to create which of the following?
  - a. A more centralized information system that eliminates the need for logistics management
  - b. Better visibility into actual customer demand, reducing uncertainty and inventory fluctuations
  - c. A decrease in the number of products offered to simplify the supply chain
  - d. More complex order processes to ensure accurate fulfillment