Report

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Inventory Overview

- **Understocked and Overstocked SKUs**
  The system currently tracks 30 understocked and 30 overstocked SKUs. This balance suggests that while replenishment processes are functional, there is room to enhance precision in inventory allocation to further minimize both excess and shortages.
- **Days Inventory Remaining**
  Inventory coverage is notably high, with 1,100 days of inventory remaining. This indicates a significant amount of capital is tied up in stock, raising concerns about overstocking, especially in slower-moving categories.
- **Reorder Activity**
  Reorder counts are robust, ranging from 4,035 to 4,120 across different regional filters. Store-level analysis shows that stores S003, S004, and S005 consistently generate high reorder counts, reflecting active replenishment cycles and possibly higher sales or more dynamic inventory management at these locations.

SKU Movement and Product Velocity

- **Fast and Moderate Movers**
  Fast movers (top 75–100% in sales velocity) are concentrated among a few Product IDs, each with sales volumes approaching 400,000 units. Moderate movers (50–75%) also show substantial movement but with a slightly broader product spread.
- **Slow and Very Slow Movers**
  A significant portion of SKUs fall into the slow (25–50%) and very slow (0–25%) movement categories. These products exhibit much lower sales velocity, yet still represent a considerable inventory investment. This highlights an opportunity to rationalize SKUs and reallocate resources to higher-performing items.

Category and Seasonality Insights

- **Overstocked SKU Patterns**
  Overstocking is most prevalent in Clothing (notably in Autumn and Spring), Furniture (Autumn and Spring), and Electronics (Spring and Winter). Toys (Spring) and Groceries also appear in the overstocked segment, though to a lesser extent. These trends suggest that both category and seasonality play a critical role in excess inventory accumulation.
- **Demand Forecast vs. Inventory Levels**
  Demand forecasts consistently exceed inventory levels in major categories such as Clothing and Electronics, indicating strong projected sales. However, if inventory is not dynamically adjusted,

there is a risk of either missed sales opportunities or further overstocking, especially if forecasts are not accurate.

Inventory Turnover and Temporal Trends

- **Monthly Inventory Turnover**
  Inventory turnover rates fluctuate between 1,400 and 1,600 units per month. Peaks are observed in July and September, reflecting possible seasonal demand surges or successful promotional campaigns. The lowest turnover appears in August, suggesting a potential period of excess inventory accumulation or reduced demand.

Strategic Recommendations

- **Reduce Excess Inventory**
  Implement targeted clearance or promotional activities for overstocked SKUs, particularly in categories and seasons where overstocking is chronic (e.g., Clothing and Furniture in Autumn/Spring). This will help free up working capital and reduce holding costs.
- **Enhance Replenishment Precision**
  Leverage store-level reorder data to identify best practices from high-performing locations (e.g., S003, S004, S005) and standardize these across the network. Fine-tune reorder triggers for understocked SKUs to ensure product availability without overcommitting resources.
- **SKU Rationalization**
  Conduct a comprehensive review of slow and very slow-moving SKUs. Consider discontinuing or consolidating these products to streamline inventory and focus on high-velocity, high-margin items.
- **Align Inventory with Demand Forecasts**
  Continuously refine demand forecasting models, especially for categories with significant forecast-inventory gaps. Adjust inventory policies dynamically in response to updated forecasts and observed sales trends.
- **Seasonal and Regional Adjustments**
  Tailor inventory strategies to reflect seasonal demand patterns and regional differences. For example, increase inventory in advance of peak turnover months (July, September) and scale back during slower periods (August).
- **Monitor and Report Progress**
  Establish a regular review cadence using dashboard metrics to track improvements in inventory turnover, SKU movement, and category performance. Use these insights to drive continuous improvement and maintain alignment with organizational goals.

Conclusion: -

The current inventory system demonstrates effective basic controls but is burdened by excess stock and a high proportion of slow-moving SKUs. By focusing on SKU rationalization, tailored replenishment, and dynamic alignment with demand forecasts and seasonal trends, the organization can significantly enhance inventory efficiency, reduce carrying costs, and better meet market demand.