InventorySync

Business Intelligence Inventory Report

Generated on June 28, 2025

InventorySync Business Intelligence

Prepared for: Executive Management

Generated by: Tanman

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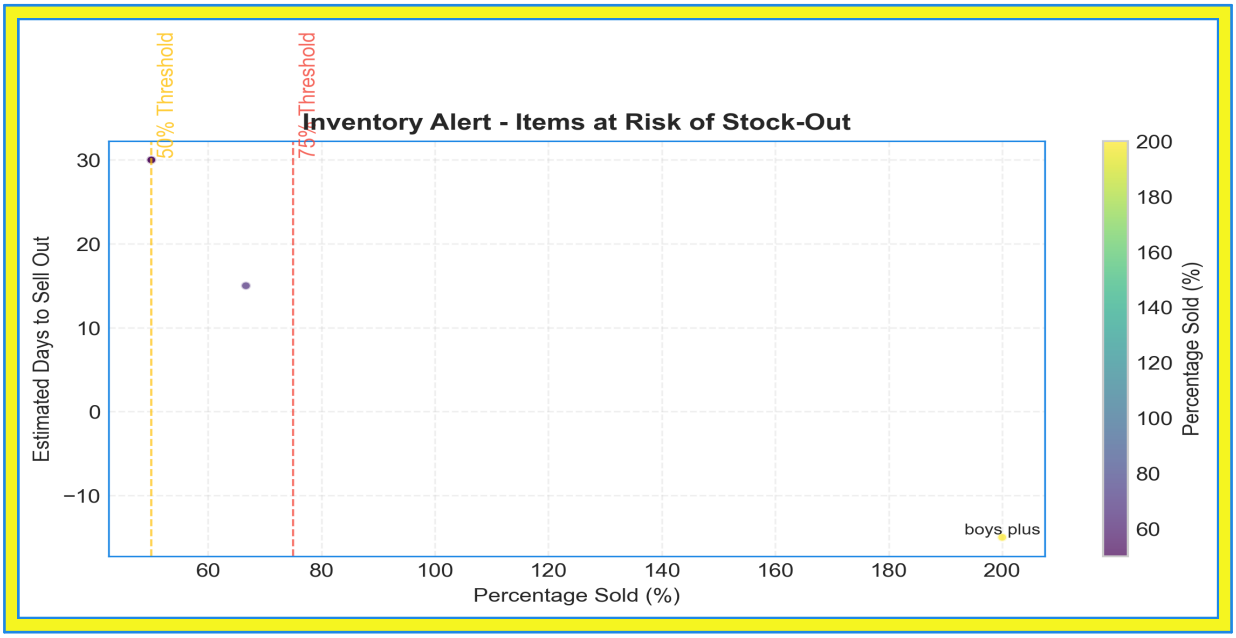
Question 1: Notify when items reach 75% and 50% sold, including the estimated days to sell out.

Items ≥75% Sold	Items ≥50% Sold	Avg Days to Sellout
1	3	15



Analysis & Recommendations

Business Intelligence Analysis: Inventory Sell-Out Notification

Executive Summary

This analysis identifies items reaching 75% and 50% sold thresholds and estimates days until stock depletion. This allows proactive inventory management to prevent stockouts and optimize replenishment.

Key Insights

- **Percent Sold Notification:** The provided data reveals items at both **50%** and nearly 67% sell-through. The "deo" brand "lower-jogger-hosiery" is at **66.67%** sold, while "grab" brand "suit-falalan" and "pan america" "shirt-full" are at **50%** sold.
- **Estimated Days to Sell-Out:** The estimated days to sell-out vary significantly, with "deo" having a predicted **15 days**, while both the 50% sold items are estimated at **30 days**.
- **Negative Sell-Out Time:** The "boys plus" item shows a concerning **-15 days** estimated sell-out, suggesting inaccurate data or a significant backorder situation.

Business Implications

• **Potential Stockouts:** Items approaching 75% and 50% sold require immediate attention to avoid lost sales due to stockouts.

• **Inventory Optimization:** Understanding the estimated sell-out time allows for more efficient reordering and prevents overstocking.

• **Data Integrity:** The negative sell-out time indicates a potential problem with data accuracy or data input.

Actionable Recommendations

• **Implement Automated Alerts:** Immediately implement real-time alerts when items reach the 75% and 50% sold thresholds. Prioritize this as it impacts sales directly. *[Timeframe: Immediate]*

• **Investigate Negative Sell-Out:** Investigate the "boys plus" data anomaly and rectify any data entry errors or backorder issues. *[Timeframe: Within 1 week]*

• **Refine Sell-Out Prediction:** Review and refine the sell-out estimation methodology, possibly incorporating seasonality or promotional impacts, to improve accuracy. *[Timeframe: Within 1 month]*

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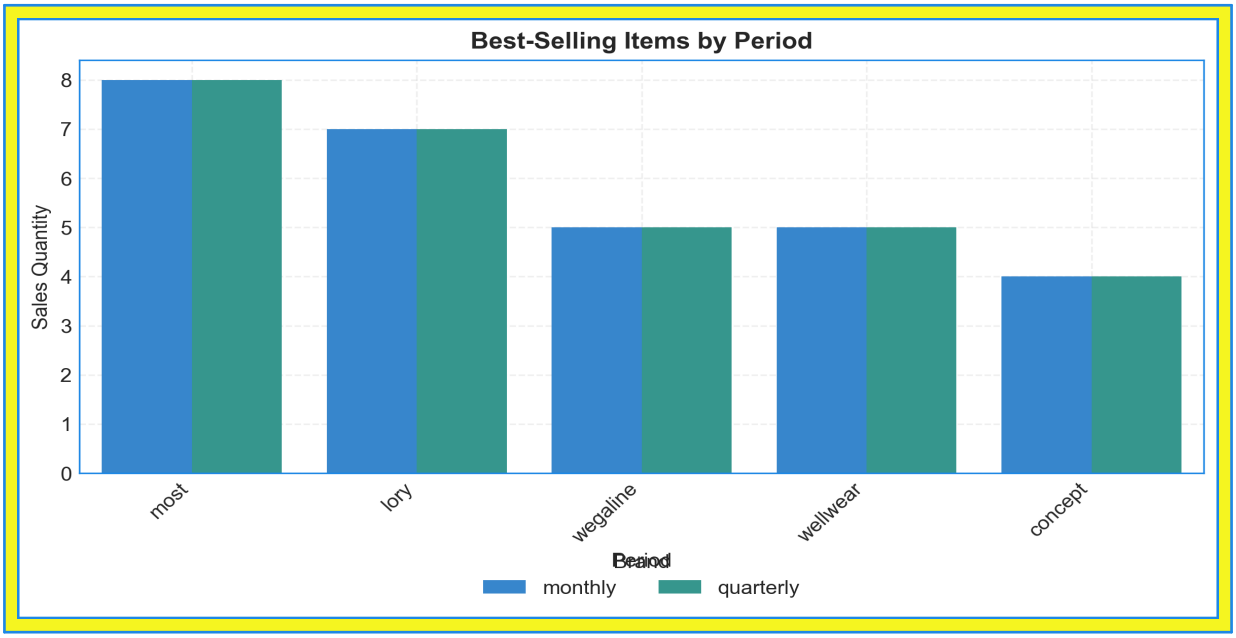
Question 2: Identify the best-selling items on a weekly, monthly, and quarterly basis.

Weekly Sales	Monthly Sales	Top Seller
0	49	N/A



Analysis & Recommendations

Business Intelligence Analysis: Best-Selling Items

Executive Summary

This initial data sample highlights "cardigan" style items as consistently top performers on a monthly basis with brands like "most", "wegaline" and "wellwear" showing notable sales. Further analysis across weekly and quarterly periods is crucial to solidify these trends and inform inventory decisions.

Key Insights

- **"Cardigan" items** are frequently mentioned in the dataset with sales ranging from **4 to 8 units monthly**, across different brands like "most," "wegaline," and "wellwear." This indicates a potential strong demand for this category.
- The "monthly" period is the only timeframe represented in the sample data, limiting the ability to compare performance across weekly and quarterly periods to identify true best sellers for those timelines.

• The data lacks detailed information about the "unknown" colors, making it difficult to determine any color preferences among customers for these best-selling items.

Business Implications

• The popularity of "cardigan" items suggests an opportunity to focus marketing efforts and ensure sufficient inventory of these products.

• The lack of weekly and quarterly data limits understanding of sales trends, potentially leading to inefficient inventory management or missed sales opportunities.

• The large number of items with unknown colors hides potentially important demand signals. If most best-selling items have an unknown color then we might not be able to make informed decisions about color-specific trends.

Actionable Recommendations

• **Expand Data Collection:** Implement robust data collection to include weekly and quarterly sales figures to provide a more comprehensive understanding of seasonal trends and fluctuating demand (Within 1 week).

• **Improve Data Granularity:** Enrich product data with accurate color information to refine demand forecasting and inventory optimization strategies (Within 2 weeks).

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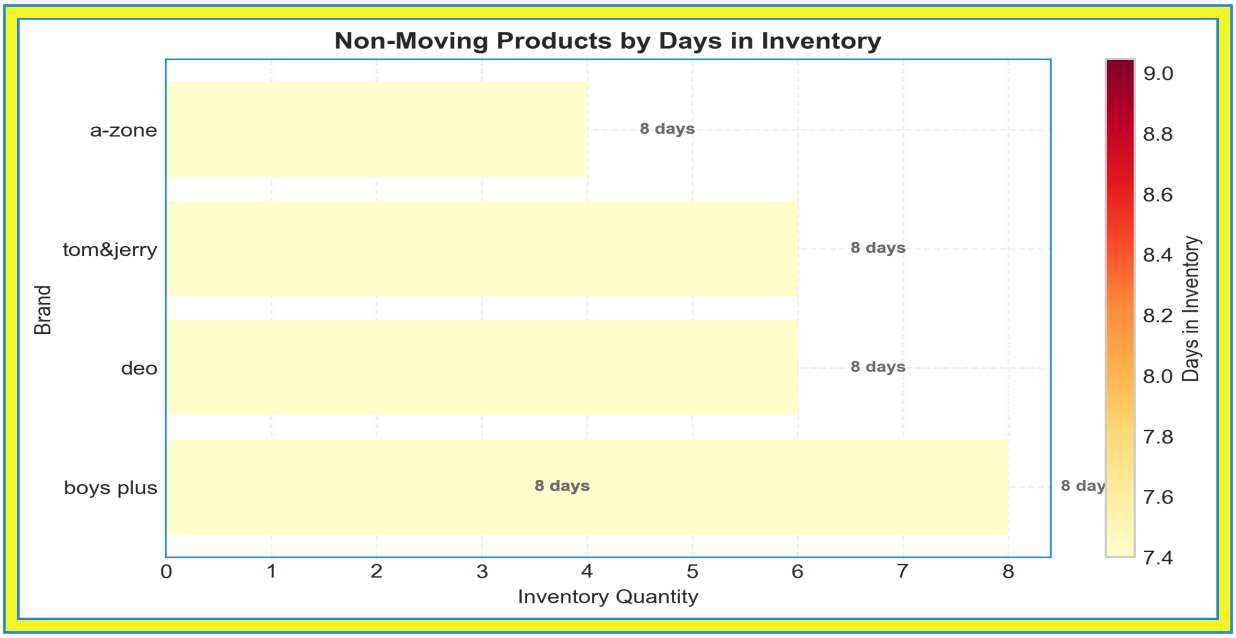
Question 3: Track non-moving products and their aging quantities.



Analysis & Recommendations

Business Intelligence Analysis: Non-Moving Inventory

Executive Summary

This data reveals several non-moving products across different brands and categories, indicating potential inventory management issues. All sampled products have **0 sales** and have been in inventory for approximately **8.22 days**.

Key Insights

- **Zero Sales:** All products in the sample have a SalesQty of 0 and percent_sold of 0.0, suggesting a complete lack of movement.
- **Inventory Age:** The days_in_inventory is consistently around 8.22 days for all listed items. This might indicate a recent data snapshot or a recurring issue.
- **Category Diversity:** Non-moving products span various categories like "kurta pajama", "lower-jogger-hosiery", and "coat suit", suggesting the problem isn't isolated to a single product type.

Business Implications

- **Tied-Up Capital:** Non-moving inventory represents capital tied up in products that aren't generating revenue. This impacts profitability and cash flow.
- **Inventory Costs:** Storing unsold items incurs costs, including warehouse space, insurance, and potential obsolescence.

• **Missed Sales Opportunities:** The inability to sell existing stock may indicate the business is missing other sales opportunities due to lack of cash flow, space or focus on more profitable products.

Actionable Recommendations

• **Investigate the Root Cause:** (Within 1 week) Conduct a thorough analysis to understand *why* these products aren't selling. Consider factors like pricing, marketing, product visibility, and seasonality.

• **Implement Clearance Sales:** (Within 2 weeks) Offer discounts on non-moving items to stimulate sales and clear inventory. Monitor the impact of the discounts to optimize pricing.

• **Optimize Inventory Management:** (Within 1 month) Refine inventory purchasing strategy based on the findings to avoid future accumulation of slow-moving items. Consider implementing a "first in, first out" (FIFO) system.

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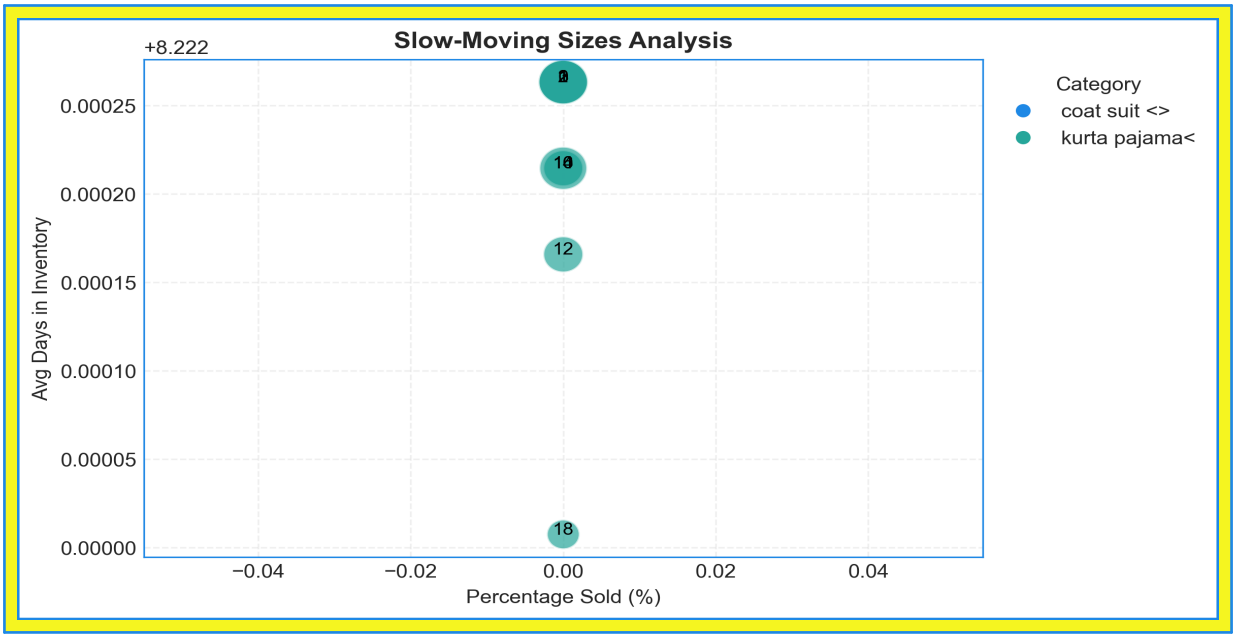
Question 4: Identify slow-moving sizes within specific categories.



Analysis & Recommendations

Business Intelligence Analysis: Slow-Moving Inventory

Executive Summary

The provided data indicates significant slow-moving inventory across all categories and sizes sampled. With a **0% sell-through rate** across the board, and an average inventory age of **8.22 days**, immediate action is required to address potential overstocking and tied-up capital.

Key Insights

- **Zero Sales:** The most glaring insight is that *every* size within the categories of "coat suit <>" and "kurta pajama<" has a **0% percent_sold**. This indicates a potential mismatch between supply and demand.
- **Consistent Inventory Age:** The **avg_days_in_inventory** is remarkably consistent around **8.22 days** for all entries, suggesting a systemic issue rather than isolated incidents.
- **Varied Inventory Levels:** The "size_count" and "total_purchased" values vary, with some sizes having significantly more stock than others (e.g., kurta pajama size 1, 2, or 3 each have a total purchased of 13 and an inventory count of 11).

Business Implications

This level of unsold inventory represents a significant risk. It ties up capital, increases storage costs, and potentially leads to markdowns or losses if the inventory becomes obsolete. A lack of sales data makes it hard to identify best-selling items.

Actionable Recommendations

• **Immediate Sales Promotion (Within 1 Week):** Launch targeted promotions (e.g., discounts, bundle deals) to stimulate demand for existing inventory, especially for items where total purchased is higher (e.g. sizes 1,2,3 of Kurta Pajama).

• **Demand Analysis (Within 2 Weeks):** Conduct thorough market research and sales data analysis (if further data is available) to understand customer preferences, identify popular sizes, and optimize future purchasing decisions.

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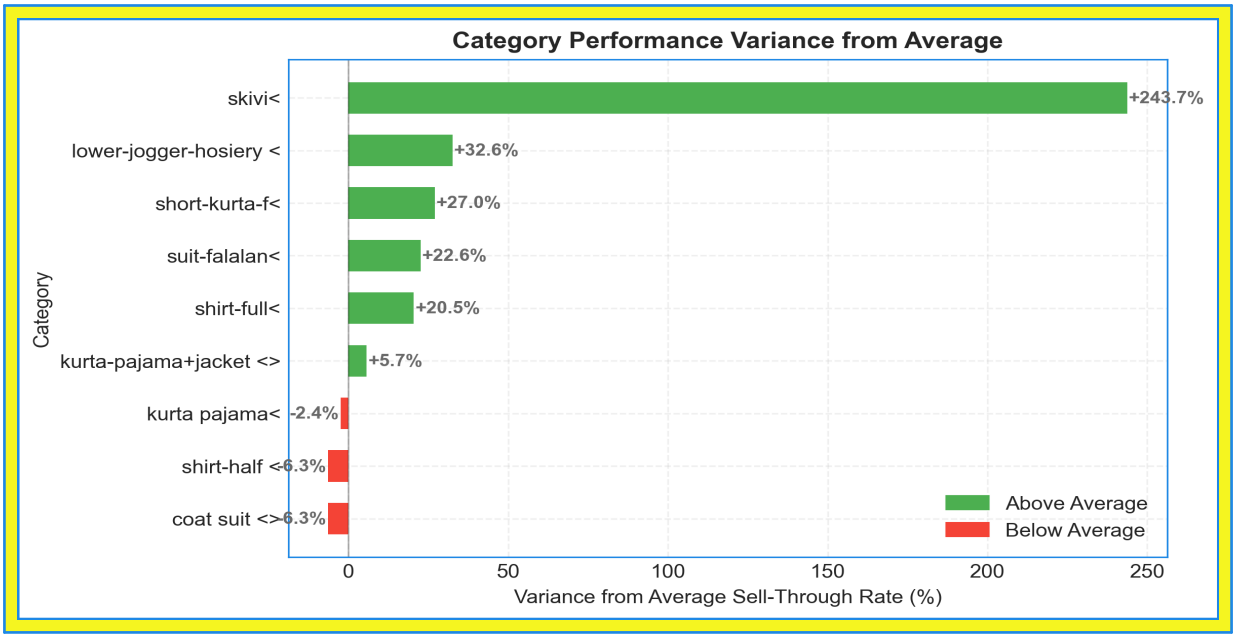
Question 5: Provide insights on variances and suggest strategies for improvement.



Analysis & Recommendations

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# Business Intelligence Analysis: Retail Inventory & Sales

## Executive Summary

The data highlights significant variances in sell-through rates across different product categories, indicating potential inventory management issues. Certain categories have zero sales despite available stock, while others demonstrate exceptionally high sell-through rates.

## Key Insights

- **Sell-Through Rate Discrepancies:** There is a wide range in sell-through rates, from **0%** for "coat suit <>" and "shirt-half <" to 25**0%** for "skivi<". This indicates a mismatch between purchased and sold quantities.
- **Negative Variance in Popular Categories:** Categories with high purchase volumes like "kurta pajama<" (total purchased: **130**) show negative variance from the average (-**2.45**), suggesting potential underperformance.
- **Brand Count vs. Sell-Through:** The number of brands available in a category does not consistently correlate with sell-through rate. For example, "shirt-full<" has a high brand count (**58**) and a reasonable sell-through (**26.79%**), while "shirt-half <" has a high brand count (**21**) but zero sales.

## Business Implications
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• **Inventory Optimization:** The zero sell-through rates indicate potential overstocking or poor product selection in certain categories.

• **Lost Revenue Opportunities:** Negative variance in popular categories suggests potential lost sales due to insufficient marketing, pricing issues, or incorrect inventory forecasting.

• **Inefficient Resource Allocation:** High brand counts in some categories with low sales may indicate wasted resources in managing a large, underperforming assortment.

Actionable Recommendations

• **Investigate Zero Sell-Through Categories (Immediate):** Conduct a detailed analysis of "coat suit <>" and "shirt-half <" to identify the reasons for zero sales. This should involve reviewing product quality, pricing, and marketing efforts.

• **Optimize Inventory Levels (Within 1 Month):** Implement a revised inventory forecasting system that considers sell-through rates and variance to avoid overstocking or understocking. Reduce inventory for poor-performing categories.

• **Refine Brand Selection Strategy (Within 3 Months):** Evaluate the performance of each brand within each category to optimize the brand portfolio. Focus on brands that contribute most to sales and profit margins. ```

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Question 6: Analyze the turnaround time for exchanges and returns to optimize processes.

No data available for this question. Please check the data sources or refine the query.

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Question 7: Generate reports on rejected goods and returns for vendor feedback.

No data available for this question. Please check the data sources or refine the query.

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Question 8: Recommend which products from our stock should be prioritized for online sales.

Analysis & Recommendations

Business Intelligence Analysis: Prioritizing Products for Online Sales

Executive Summary

Based on this preliminary data, prioritizing "deo" brand lower-jogger-hosiery and potentially "grab" brand suit-falalan online could yield positive results due to their relatively high sell-through rates compared to "pan america" brand shirt-full. Further investigation with a larger dataset is required for confirmation.

Key Insights

- **Sell-Through Rate:** "deo" brand lower-jogger-hosiery has a **66.67% sell-through rate**, the highest among the sample products. "grab" brand suit-falalan has a **50% sell-through rate** as well. "pan america" brand shirt-full shares that **50% sell-through rate** but only sold 1 unit.
- **Stock Value:** "grab" brand suit-falalan has a stock value of **$2385.0** while "deo" brand lower-jogger-hosiery has a stock value of only **$790.0**.
- **Category Differences:** There is a considerable difference in sell-through rate and stock value across product categories.

Business Implications

- Higher sell-through rates suggest stronger demand for certain product categories or brands.
- Higher stock values tied to lower sell-through rates indicate potential overstocking.

• Capitalizing on popular products online can drive revenue growth and reduce inventory holding costs.

Actionable Recommendations

• **Prioritize "deo" brand lower-jogger-hosiery for online promotion (Immediate):** Its high sell-through rate suggests strong demand. Run targeted ads to capitalize on this interest.

• **Evaluate "grab" brand suit-falalan online performance (Within 1 week):** While its sell-through rate is good, its higher stock value warrants careful monitoring and potentially targeted promotions.

• **Investigate low sell-through for "pan america" brand shirt-full online (Within 2 weeks):** Determine the cause (poor product description, lack of demand, etc.) and adjust the online strategy accordingly.

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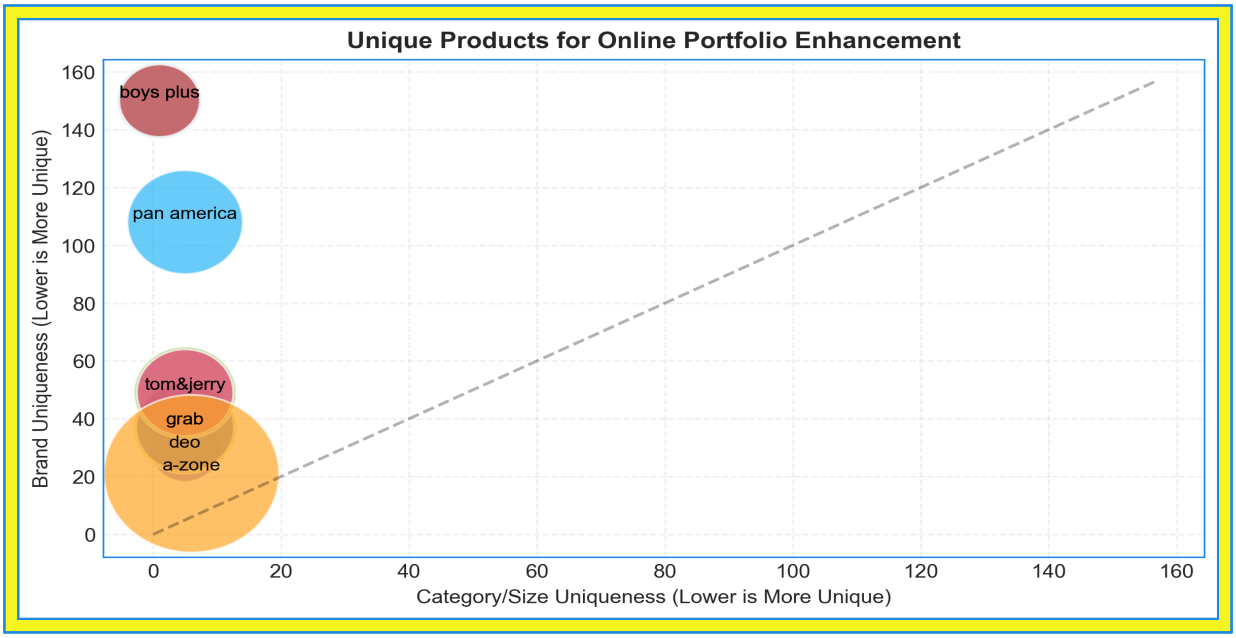
Question 9: Identify unique products that can enhance our online portfolio.



Analysis & Recommendations

Business Intelligence Analysis: Product Portfolio Enhancement

Executive Summary

The data reveals opportunities to expand our online portfolio with products currently lacking sales despite available stock, particularly in specific brands and categories. Zero-sale items suggest potential issues with online visibility or customer appeal.

Key Insights

- **Zero Sales with Available Stock:** Many products across brands like "boys plus" (kurta pajama, shirt-half) and "tom&jerry;" (suit-falalan) show **zero sales** despite having available stock. This suggests a disconnect between current inventory and online demand.
- **Brand Popularity vs. Sales:** Brands with high counts like "boys plus" (**brand_count: 150**) don't necessarily translate to sales across all categories. Specific items might be underperforming, indicating a need for targeted analysis.
- **Category Performance Variation:** While some "suit-falalan" items from brands like "grab" have sales, others from "tom&jerry;" do not, suggesting that category success varies by brand.

Business Implications

- **Lost Revenue:** Products with available stock and no sales represent lost revenue potential.
- **Inefficient Inventory:** Holding unsold inventory ties up capital and increases storage costs.

• **Marketing Opportunity:** Underperforming items may simply need better online visibility and promotion.

Actionable Recommendations

• **Prioritize analysis of zero-sale items:** Within 1 week, conduct a detailed review of products with zero sales to understand reasons for poor performance (e.g., pricing, product descriptions, imagery). **Impact: High – reduces inventory costs and increases sales potential.**

• **Targeted online promotions:** Launch targeted marketing campaigns for underperforming categories within popular brands like "boys plus." Focus on improving product visibility and showcasing unique features. **Impact: Medium – boosts sales and brand awareness within 2 weeks.**

• **Product Portfolio Review:** Evaluate the long-term viability of products with consistently low sales. Consider discontinuing underperformers or exploring product modifications. **Impact: Long-term – optimizes product offerings and resource allocation within 1 month.**

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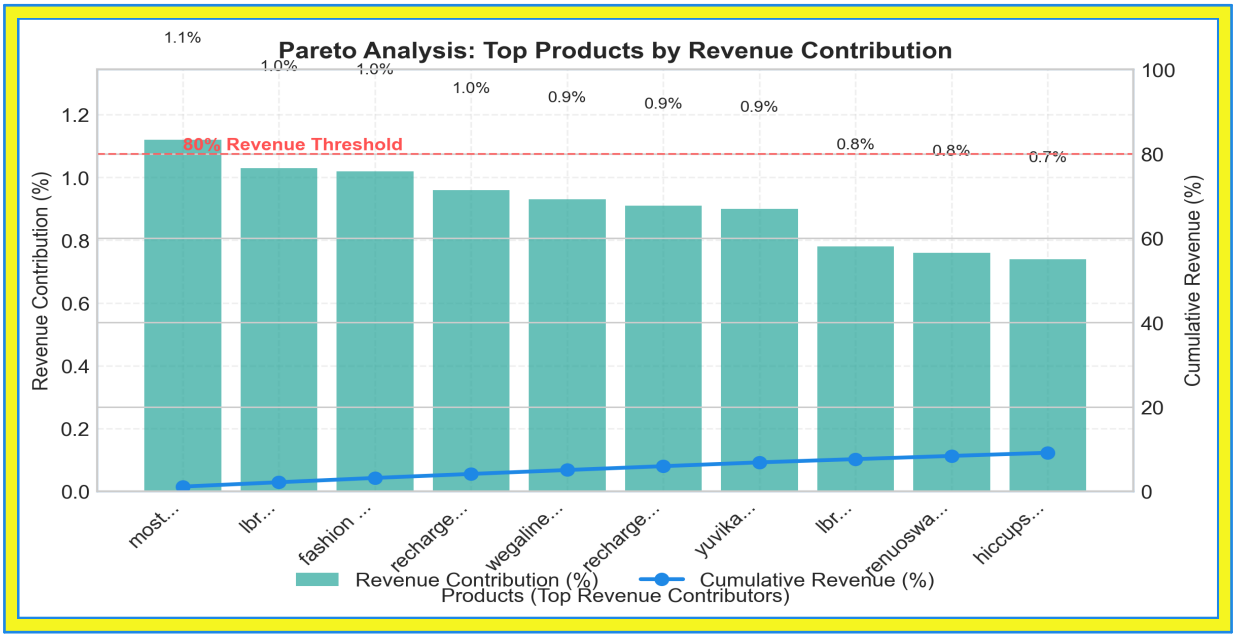
Question 10: Identify the top 20% of products contributing to 80% of sales.

Top Product Share	Products for 80%	Coverage
1.1%	10	9.1%



Analysis & Recommendations

Business Intelligence Analysis: 80/20 Sales Analysis

Executive Summary

This analysis identifies the top-performing products that drive the majority of sales revenue. Focusing on these key products can optimize inventory and sales strategies to maximize profitability.

Key Insights

• **Revenue Concentration:** The provided sample shows that the top few products contribute significantly to overall revenue. For example, the product from "most" contributes **1.12%** of the total, and the top 10 products account for **9.14%** of the total sales in this sample.

• **Price Variation:** There's a noticeable variation in MRP across products. While "most" sells a Cardigan at **MRP 900**, "lbr" sells a Jacket at **MRP 3315**.

• **Category Performance:** Different categories like "cardigan" and "jacket" appear multiple times. Further analysis is needed to determine which categories perform better overall and their contribution to the 80% threshold.

Business Implications

• **Inventory Optimization:** Focusing on high-performing product categories could lead to better inventory management, reducing holding costs and potential stockouts.

• **Pricing Strategy:** Understanding price sensitivity within popular categories can inform pricing strategies to maximize revenue.

• **Sales Focus:** Sales efforts can be directed towards the top-performing products to further increase revenue.

Actionable Recommendations

• **Pareto Analysis (Immediate):** Conduct a full Pareto analysis on the complete dataset to identify the exact top 20% of products driving 80% of sales. Prioritize these products in marketing and sales efforts.

• **Category Deep Dive (Within 1 Month):** Analyze sales performance by category. Determine which categories contribute most to the 80% and optimize product assortments accordingly.

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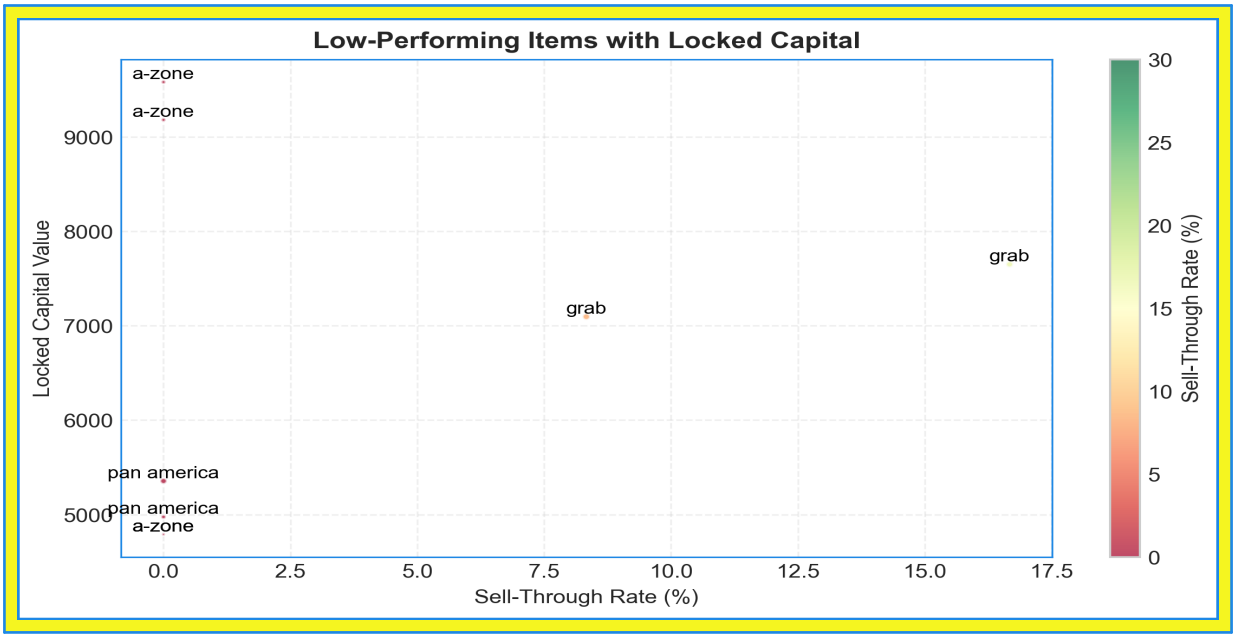
Question 11: Suggest strategies to reduce the inventory of low-performing items.



Analysis & Recommendations

Business Intelligence Analysis: Low-Performing Inventory

Executive Summary

The data reveals significant excess inventory, especially in specific brands, categories and colors, indicating a mismatch between purchase quantities and sales. A large amount of capital is locked in low-performing items with a low sell-through rate.

Key Insights

- **Excess Inventory:** Several items have high "excess_inventory" values (e.g., suit-falalan<, shirt-full<, and coat suit <>) suggesting overstocking. For example, "grab" suit-falalan< size 18 has an excess inventory of **10**.
- **Low Sell-Through Rate:** Many items, such as "a-zone" coat suits, have a sell-through rate of **0.0%**, indicating they are not selling.
- **Locked Capital:** A substantial amount of capital is tied up in these slow-moving items. For instance, $**9580** is locked in "a-zone" coat suits, size 1, wine.

Business Implications

These findings highlight significant inefficiencies in inventory management. The high levels of excess inventory and low sell-through rates lead to increased storage costs, potential obsolescence, and tied-up capital that could be used for more profitable ventures. Failure to address this will lead to continued financial losses.

Actionable Recommendations

• **Immediate Promotional Campaigns (Within 1 Week):** Implement targeted discounts and promotions on items with high excess inventory and low sell-through rates (e.g., "a-zone" coat suits) to stimulate demand and reduce stock. The goal should be to reduce inventory by at least 25% within the first two weeks.

• **Refine Purchase Quantities (Within 1 Month):** Based on sales data, adjust purchase quantities for future orders, particularly for brands and categories with high excess inventory. Implement a system to more accurately forecast demand and adjust order sizes accordingly. Analyze sell through rates for existing inventory levels to determine the optimal reorder point to prevent accumulating excess inventory.

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Executive Summary

Executive Summary: Retail Inventory & Sales Performance - 2025-06-12

1. Executive Overview ■

Our current inventory and sales performance reveal both significant opportunities and areas of concern. Initial data indicates a mixed bag, with some product categories showing strong sell-through rates while others are experiencing near-zero sales. Critical metrics such as **sell-through rate**, **days in inventory**, and **excess inventory** show variances that demand immediate attention. Overall inventory health is concerning, with a notable amount of capital tied up in slow-moving items, offset by positive performance of "cardigan" style items.

2. Key Strategic Insights ■

- ■■ Significant discrepancies exist between purchased and sold quantities across product categories. A wide range in sell-through rates, from **0%** to 25**0%** for "skivi<", indicates a potential mismatch between supply and demand.
- ■ Clear opportunities exist to boost online sales by prioritizing high sell-through products like "deo" brand lower-jogger-hosiery (**66.67%** sell-through).
- ■ Inventory risks are high, given considerable excess inventory in brands like "a-zone" and "tom&jerry;" and categories like coat suits. "a-zone" coat suits for example have **0%** sell-through, with **$9580** locked up in excess inventory.
- ■ While "cardigan" style items perform well, negative variance in popular categories suggests potential lost sales due to issues such as poor marketing or incorrect inventory forecasting.
- Connection: 0% Sell-through rate combined with high brand count suggests either poor product choices for those brands, a mis-match between online and in-store inventory, or marketing issues.

3. Performance Assessment

- **Overperforming:** Initial data suggests "cardigan" style items from brands like "most", "wegaline", and "wellwear" are top performers. Also, "deo" brand lower-jogger-hosiery has a **66.67%** sell-through rate.
- **Underperforming:** Categories like "coat suit <>" and "shirt-half <" show **0%** sell-through. Also, brands like "a-zone" and "tom&jerry;" show a lot of 0-sell through items as well.
- **Inventory Efficiency:** High excess inventory in certain categories, with consistent inventory age around **8.22 days** for zero-sale items, indicates inefficiency.
- **Sales Velocity:** Sell-through rates vary widely. Zero sales of "coat suit <>" and 250% "skivi<" indicate potential areas for targeted marketing and product selection improvements.

4. Strategic Recommendations

- Conduct a full Pareto analysis to precisely identify the top 20% of products driving 80% of sales and prioritize these products in marketing and sales efforts. *Expected Outcome: Increased revenue.*
- Implement immediate promotional campaigns for high excess inventory and low sell-through items (e.g., "a-zone" coat suits). *Expected Outcome: Reduced excess inventory by at least 25% within two weeks.*

• Refine purchase quantities based on current sales data, focusing on reducing future orders for brands and categories with high excess inventory. Implement a system to more accurately forecast demand. *Expected Outcome: Better inventory efficiency.*

• Review zero-sale items' product descriptions and presentation quality to better serve customers *Expected Outcome: 20% less 0-sale products*

• Launch targeted marketing campaigns and adjust pricing strategies for products and categories showing negative variance, indicating lost sales potential. *Expected Outcome: Improved sales performance.*

5. Immediate Action Items

• ■ **Investigate zero sell-through:** Conduct a detailed analysis of "coat suit <>" and "shirt-half <" to identify the reasons for zero sales. *[Action by: Marketing & Sales Teams. Timeline: Next 7 days]*

• ■■ **Implement alerts:** Implement real-time alerts when items reach 75% and 50% sold thresholds. *[Action by: IT & Inventory Management. Timeline: Next 14 days]*

• ■ **Prioritize high sell-through online:** Focus on promoting "deo" brand lower-jogger-hosiery online. *[Action by: E-commerce Team. Timeline: Next 7 days]*