

KPI Summary Report

Tools Used: SQLite, SQL, Power BI



Objectives

ERD

SQL

Queries

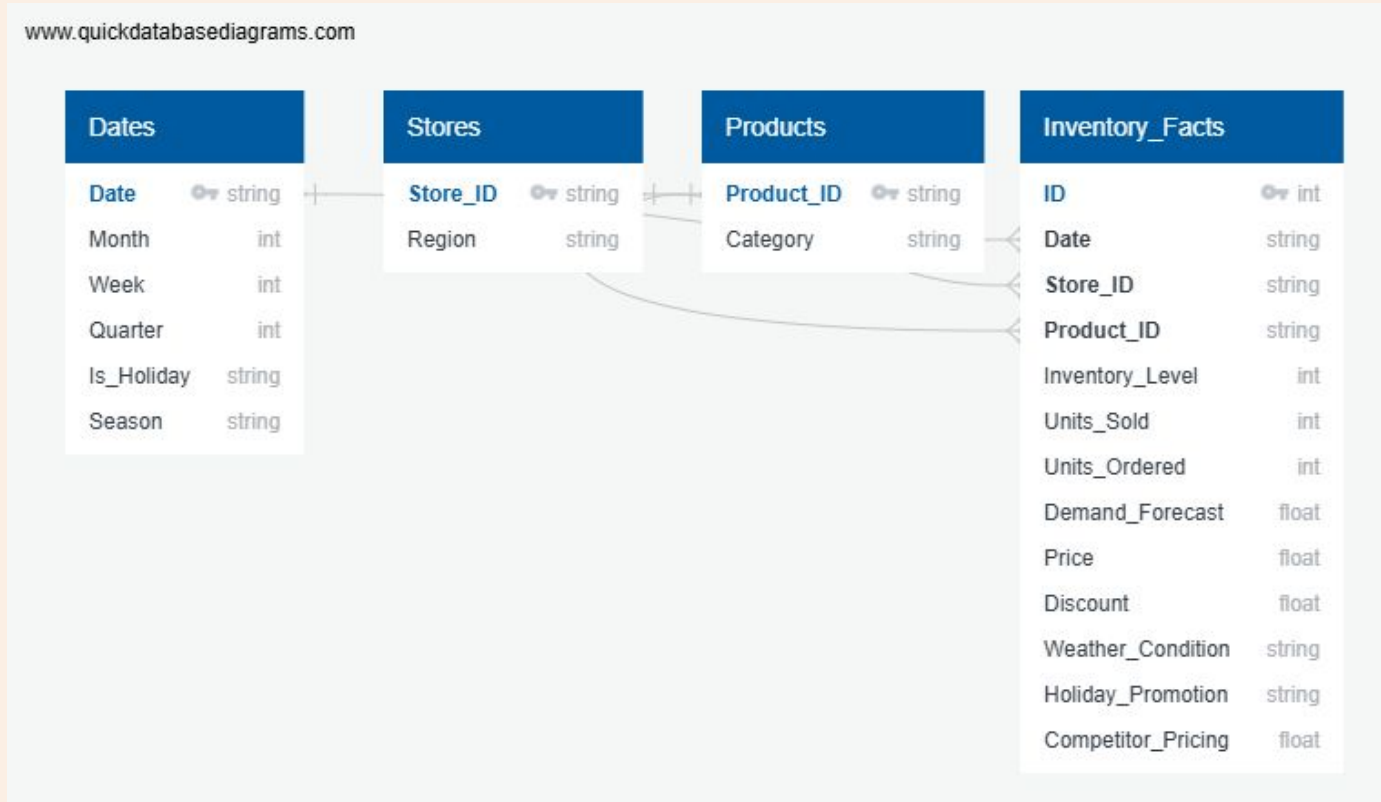
**Result
Analysis**

**KPI
Dashboard in
Power BI**

Insights

**Recommend
ations**

ERD (Entity Relationship Diagram)



Key Highlights:

- Total Stock: **1.25M**
- Total Sales: **850.15K**
- Stockout Rate: **6.67%**
- Avg Inventory Age: **~1.6 days**
- Fastest selling: Clothing, Toys
- Sales by Season: Slight dips in winter

KPI calculated using Power BI Dashboard

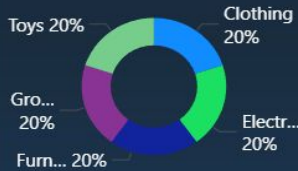
Urban Retail Co. KPI Dashboard

Total Stock
1.25M

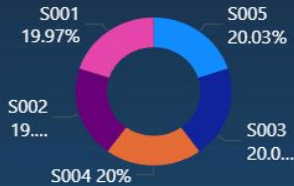
Total Sales
850.15K

Stockout Rate Percent
6.67

Sales by Category



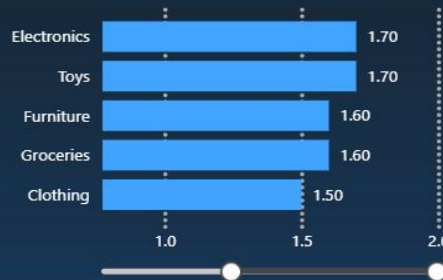
Sales by Store ID



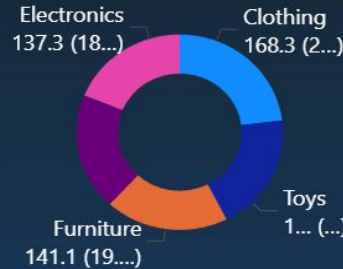
Sales by Season



Average Inventory Levels



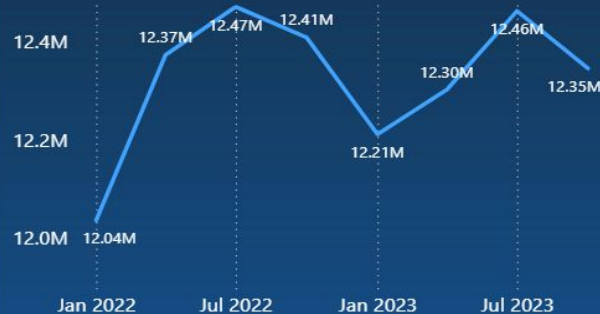
Average Stock Level



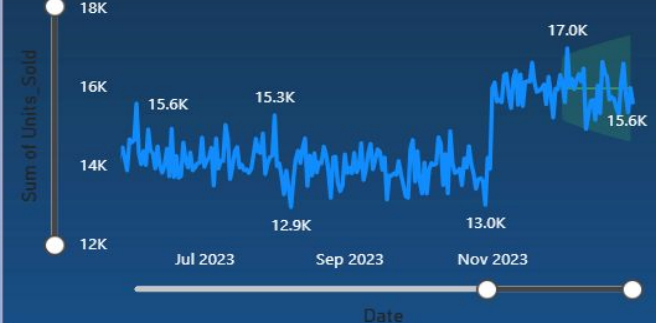
Actual Sales vs Forecast Sales



Number of items Not Refilled



Sales Forecast-1 month



Insights

- Clothing and Toys have highest Inventory Turnover (>1.5) — fast-moving
- Stockout Rate of 6.67% is moderate but needs tracking
- Around 12.4M units flagged as "not refilled" across 2 years
- Refill issues consistent month-over-month with no alternative reason found
- Winter dip in forecast accuracy suggests potential mismatch in seasonal planning

Recommendations

Focus Area	Strategy	Supporting Data/Observation
Stockout Management	Implement dynamic reorder points using 7-day moving average of Units Sold	Reorder estimates helped detect understocking trends; 6.67% stockout rate observed
Overstock Control	Lower inventory buffer for slow-moving items (e.g., Furniture, Electronics)	Inventory Turnover < 1.5 for these categories
Demand Forecasting	Enhance forecasting models to factor in weather/seasonality patterns	Winter season showed forecast dips; demand spikes not aligned with forecast accuracy
Supplier Performance	Add Supplier_ID, Refill_Log to Inventory_Facts to detect recurring delays	Over 12.4M units sold with no refill orders detected across stores
Replenishment Alerts	Implement alerts when Inventory_Level falls below 1.2× average daily sales (lead time-based)	Fast-moving items like Clothing, Toys frequently run low before restock
SKU Prioritization	Allocate warehouse space preferentially for high-turnover SKUs	Top 25% of SKUs (by Inventory Turnover) contribute >60% of sales

Thank You

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