RETAIL INVENTORY AND MANAGEMENT ANALYSIS

STOCKOUT %
SOLD OUT **51.86**

AVG Supplier Time
5.52

DEMAND VS STOCK %
1.2

Filters

Category
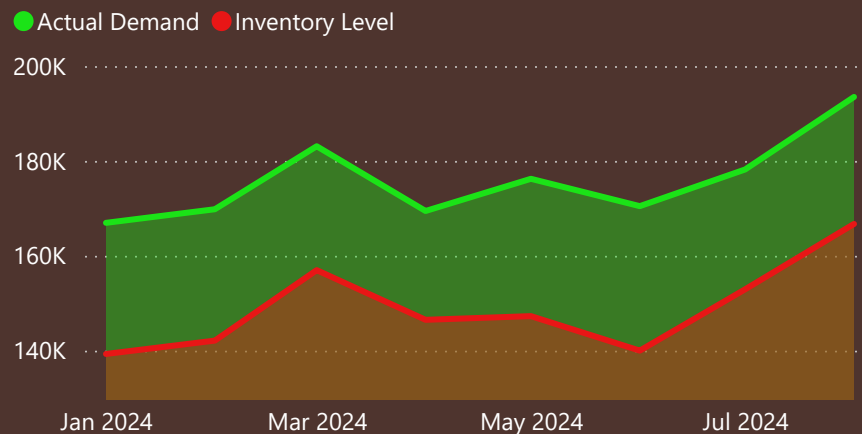All

Holiday
☐ False
☐ True

STORE ID
All

Location
All

DATE
01-01-2024
16-09-2024

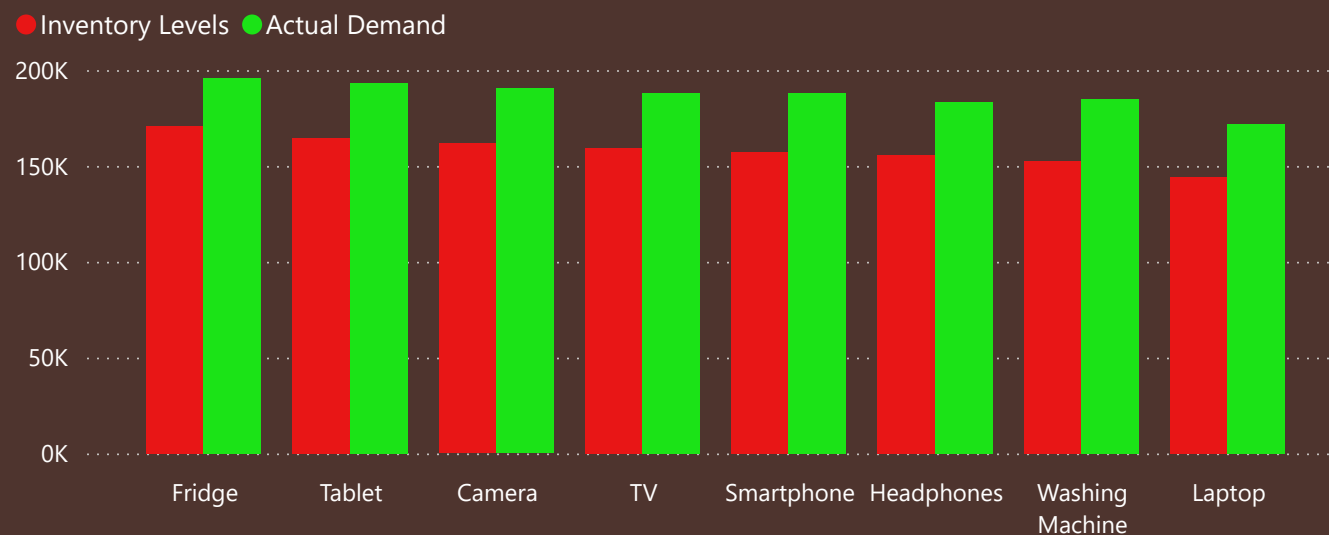## ACTUAL DEMAND VS INVENTORY LEVEL BY MONTHS

● Actual Demand ● Inventory Level

	Jan 2024	Mar 2024	May 2024	Jul 2024

(Y-axis: 140K, 160K, 180K, 200K)

STOCKOUT% BY PRODUCTS

Product	Stockout %
Tablet	13.01%
Fridge	12.80%
Smartphone	12.80%
Camera	12.59%
TV	12.54%
Washing Ma...	12.39%
Headphones	12.35%
Laptop	11.52%

AVG LEAD TIME BY TOP SUPPLIER

Supplier	Avg Lead Time
192	6.61
220	6.00
418	6.00
262	5.95
470	5.79
405	5.32
153	5.30
214	5.29
113	4.83
415	4.82
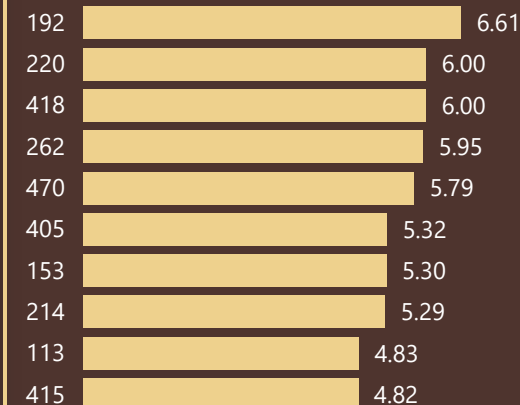
INVENTORY LEVEL VS ACTUAL DEMAND BY PRODUCT NAME

● Inventory Levels ● Actual Demand

	Fridge	Tablet	Camera	TV	Smartphone	Headphones	Washing Machine	Laptop

(Y-axis: 0K, 50K, 100K, 150K, 200K)

STOCKOUT RATE BY MONTHS

	Jan 2024	Mar 2024	May 2024	Jul 2024

(Y-axis: 50, 55)
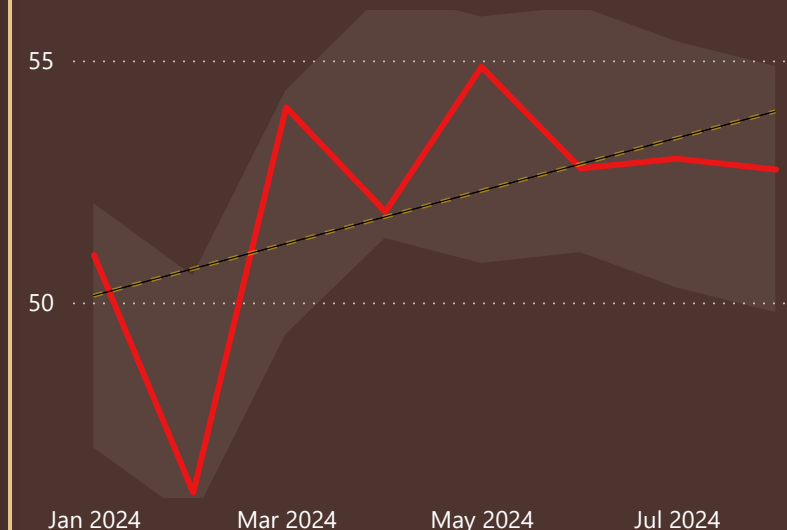
SALES PERFORMANCE ANALYSIS

TOTAL QTY SALES
🛒 15K

AVG QUANTITY SOLD
📈 41

MOST SOLD PRODUCT
Fridge

01-01-2024 📅   16-09-2024 📅

Slicers

Category
All

Holiday
☐ False
☐ True

STORE ID
All

Location
All

QUANTITY SOLD BY MONTHS

2000	
1900	
1800	
1700	
1600	

Jan 2024   Mar 2024   May 2024   Jul 2024

QUANTITY SOLD BY SUM

Appliances 3.5K
Electronics 10.5K
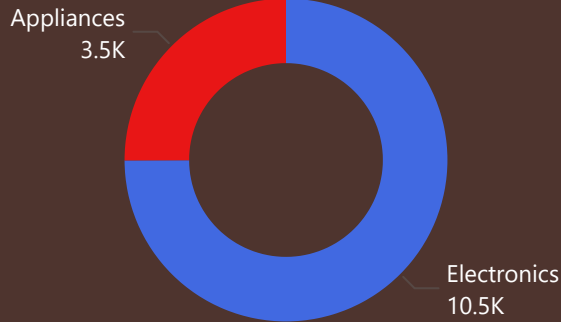
QUANTITY SOLD BY PRODUCT NAME

Product	Quantity
Fridge	84
Laptop	81
Headphon...	80
Camera	75
TV	75
Smartphone	72
Washing ...	72
Tablet	61

QUANTITY SOLD BY WEEKDAY

Weekday	Quantity
Thursday	2.2K
Monday	2.2K
Tuesday	2.0K
Saturday	2.0K
Wednesday	2.0K
Friday	1.9K
Sunday	1.8K
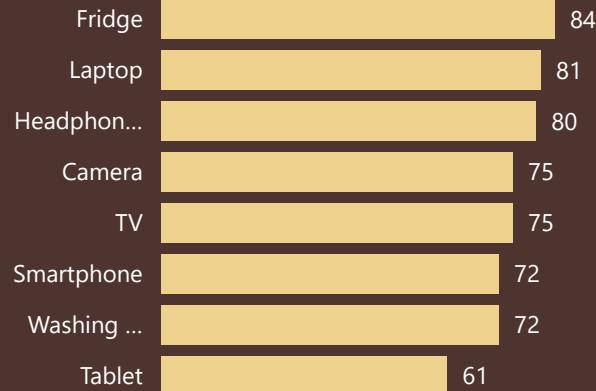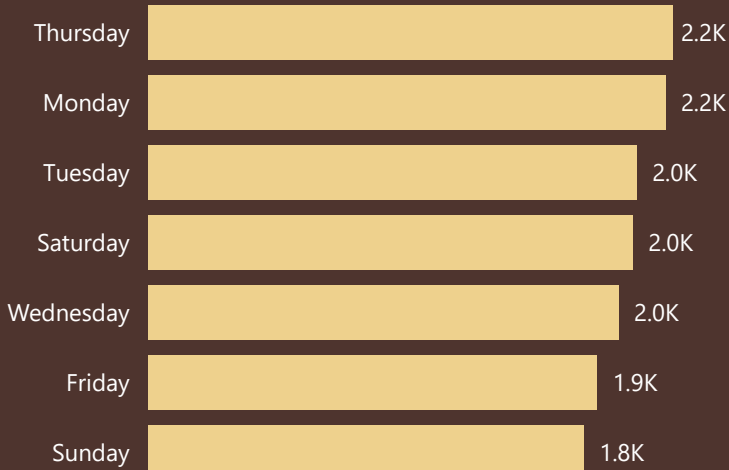
CATEGORY QUANTITY SOLD BY WEATHER

● Appliances ● Electronics

Weather	Appliances	Electronics
Sunny	0.9K	2.9K
Cloudy	1.0K	2.8K
Stormy	0.9K	2.8K
Rainy	0.9K	2.6K
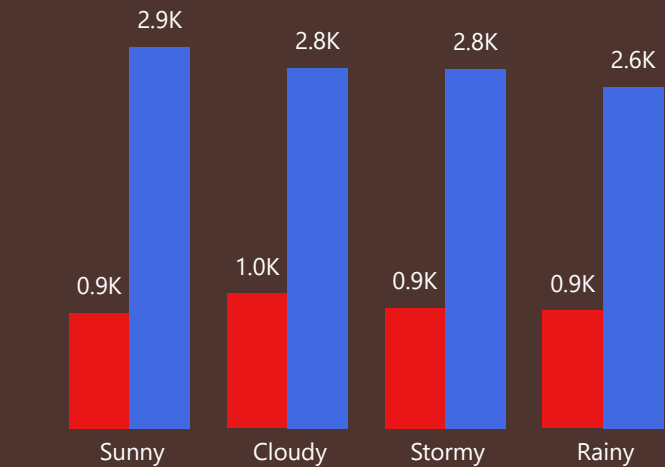
QUANTITY SOLD BY STORE ID

store_id	Quantity
5	424
15	411
11	406
9	405
19	402
1	401
16	384
10	380
13	380
2	375

FORECASTING & DEMAND ANALYSIS

FORECAST ACCURACY% 54

ROUGH MAPE % 55

STOCKOUT % 53.59

Filters

Category
All

Holiday
☐ False
☐ True

STORE ID
All

Location
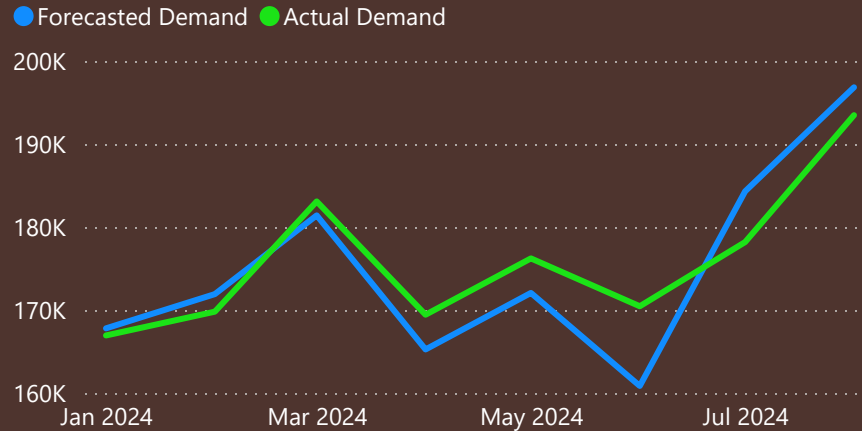All

DATE
01-01-2024
16-09-2024

FORECASTED DEMAND VS ACTUAL DEMAND

● Forecasted Demand ● Actual Demand

(Line chart from Jan 2024 to Jul 2024, values range 160K–200K)

%FORECAST ERROR BY PRODUCTS

Product	Error
TV	3.0
Tablet	2.3
Laptop	1.1
Fridge	0.8
Washing ...	0.2
Headpho...	0.0
Camera	-0.9
Smartpho...	-1.3
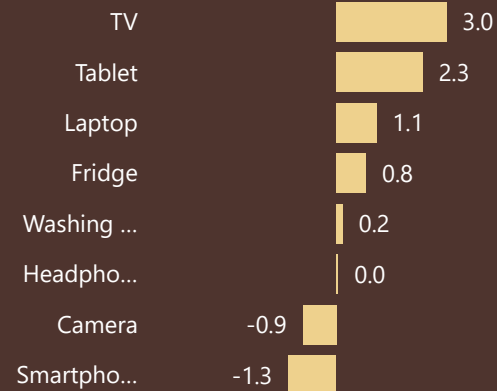
%FORECAST ERROR BY STORE LOCATIONS

● Appliances ● Electronics

Location	Appliances	Electronics
Los Angele...	-2	4
Chicago, IL	1	2
Miami, FL	4	1
New York, ...	1	-2
Dallas, TX	-2	-4
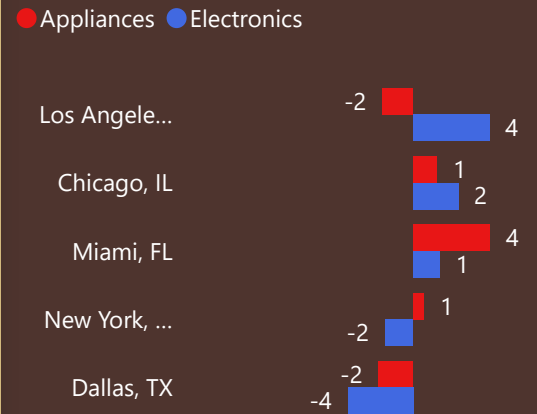
FORECASTING ACCURACY BY PRODUCTS

Product	Accuracy
Headphones	55
Tablet	55
TV	55
Fridge	54
Camera	54
Laptop	53
Smartphone	53
Washing M...	53

STOCKOUT BY WEEKDAY AND CATEGORY

● Appliances ● Electronics

Weekday	Appliances	Electronics
Friday	89	265
Monday	107	304
Saturday	115	270
Sunday	78	256
Thursday	92	289
Tuesday	88	274
Wednesday	98	268
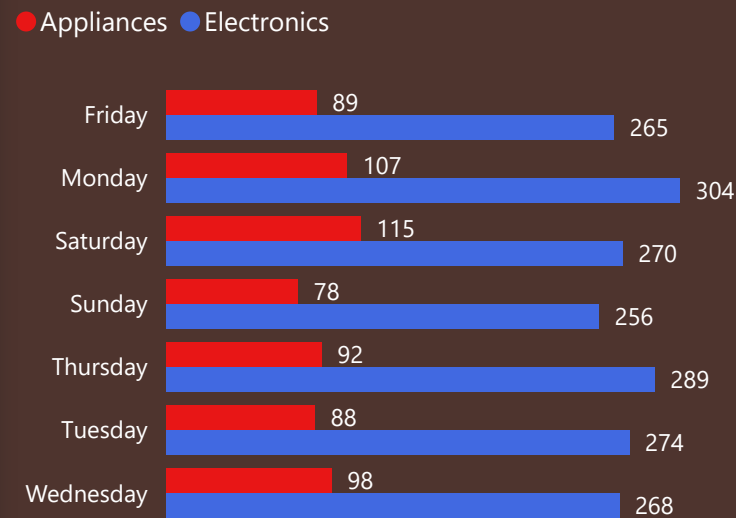
FORECAST ACCURACY % BY MONTHS

(Area chart from Jan 2024 to Sep 2024, values range 52–56)
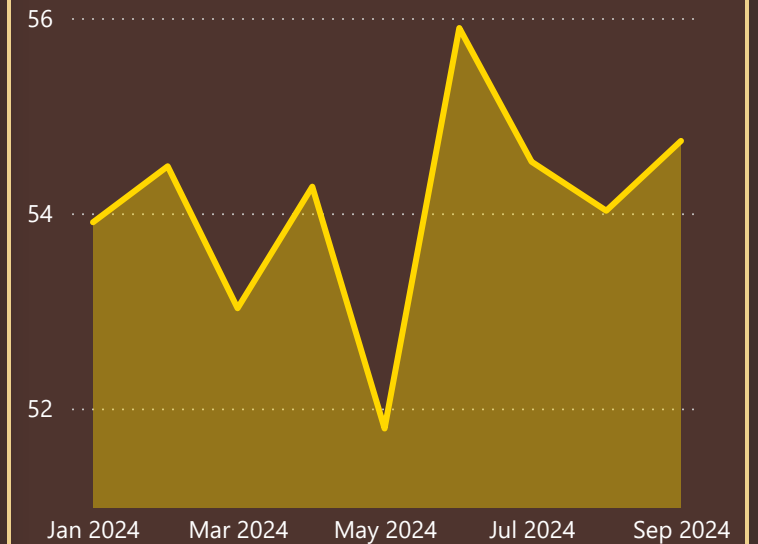
KEY INSIGHTS AND STRATEGIC RECOMMENDATIONS

MOM SALES GROWTH ANALYSIS

Month	TOTAL SALES	Current Month Sales	Previous Month Sales	MOM Growth%
January	1672	1672		
July	1833	1833	1613	13.64%
May	1768	1768	1668	6.00%
February	1674	1674	1672	0.12%
March	1809	1809	1674	8.06%
June	1613	1613	1768	-8.77%
April	1668	1668	1809	-7.79%
August	1968	1968	1833	7.36%

AVG MOM GROWTH RATE%
📈 **2.7%**

📊 **Consistent Yet Fluctuating Sales Trends!** The **average MoM growth rate is 2.66%**, showing a stable but uneven sales trend. While **March (+8.06%), May (+6.00%), July (+13.64%), and August (+7.36%)** saw strong increases, **April (-7.79%)** and **June (-8.77%)** experienced sharp declines.

📉 **Possible Reasons for Growth Fluctuations:**

◆ **Seasonal Demand Variations** – Certain months may see higher or lower customer demand 📅

◆ **Promotions & Discounts** – Spikes in sales could be linked to seasonal offers or marketing campaigns 🎯

◆ **Stock Availability Issues** – Sudden drops indicate stockouts or supply chain delays 📦

◆ **Market Trends & Customer Behavior** – Shifts in consumer preferences may have influenced sales 📊

✅ **Business Recommendations:**

◆ **Stabilize Declining Months** – Investigate April & June's sales drops to prevent future losses 🔍

◆ **Leverage Peak Months** – Reinforce marketing strategies used in March, July & August 🚀

◆ **Optimize Inventory Planning** – Ensure adequate stock to prevent shortages during demand spikes 📦

◆ **Data-Driven Promotions** – Align discounts with historical high-growth periods to maximize sales 💡

STOCKOUT AND FORECAST ANALYSIS

STOCKOUT %
SOLD OUT **51.86**

FORECAST ACCURACY%
54

⚠️ **High Stockout Alert!** With a **51.86% stockout rate**, more than half of the demanded products were unavailable, leading to **lost sales opportunities and customer dissatisfaction**. This suggests **serious supply chain inefficiencies** that need immediate attention.

📊 **Moderate Forecast Accuracy!** The current **forecast accuracy is 54%**, indicating that while predictions are somewhat reliable, there's **significant room for improvement**. This suggests that **almost half of the actual demand is not aligning with forecasts**, which could impact inventory planning and business decisions.