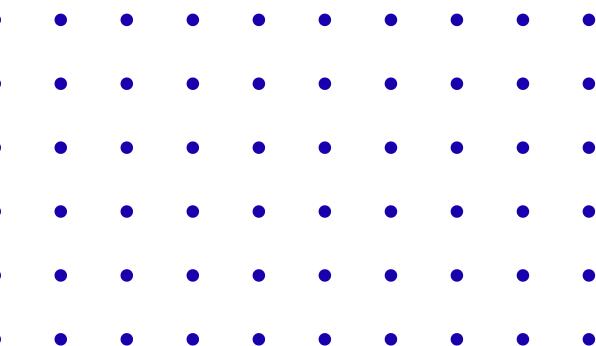


Supply Chain Dataset Analysis

Visual Forecasting & Insights Dashboard



Business Challenge

The Problem:

- Delayed shipments 
- Stock shortages 
- Unclear supplier performance 

Our Goal:

- Turn complex supply chain data → clear, actionable insights

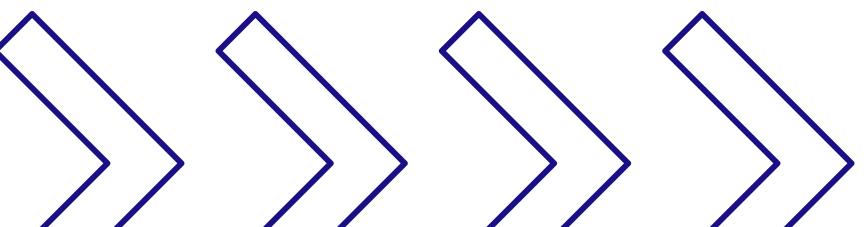


Snapshot of the Data

Dataset Scope:

- 10K+ transactions
- 5 suppliers, 7 product categories
- Revenue, stock, defect, and delivery metrics

Tools: Power BI | Python | SQL





Performance KPIs



Top Revenue

2.29M



Products Sold

46K



Avg Lead Time

17 days



Avg Defect Rate

0%



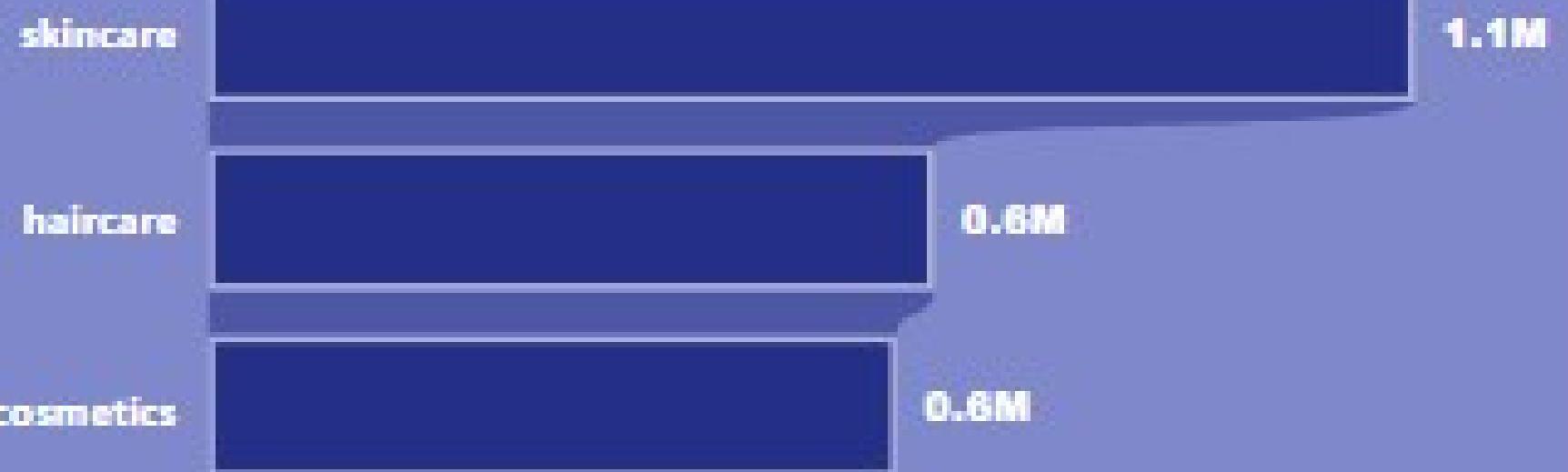


Revenue & Sales Insights

Top Revenue Categories



Top Revenue by Product Category





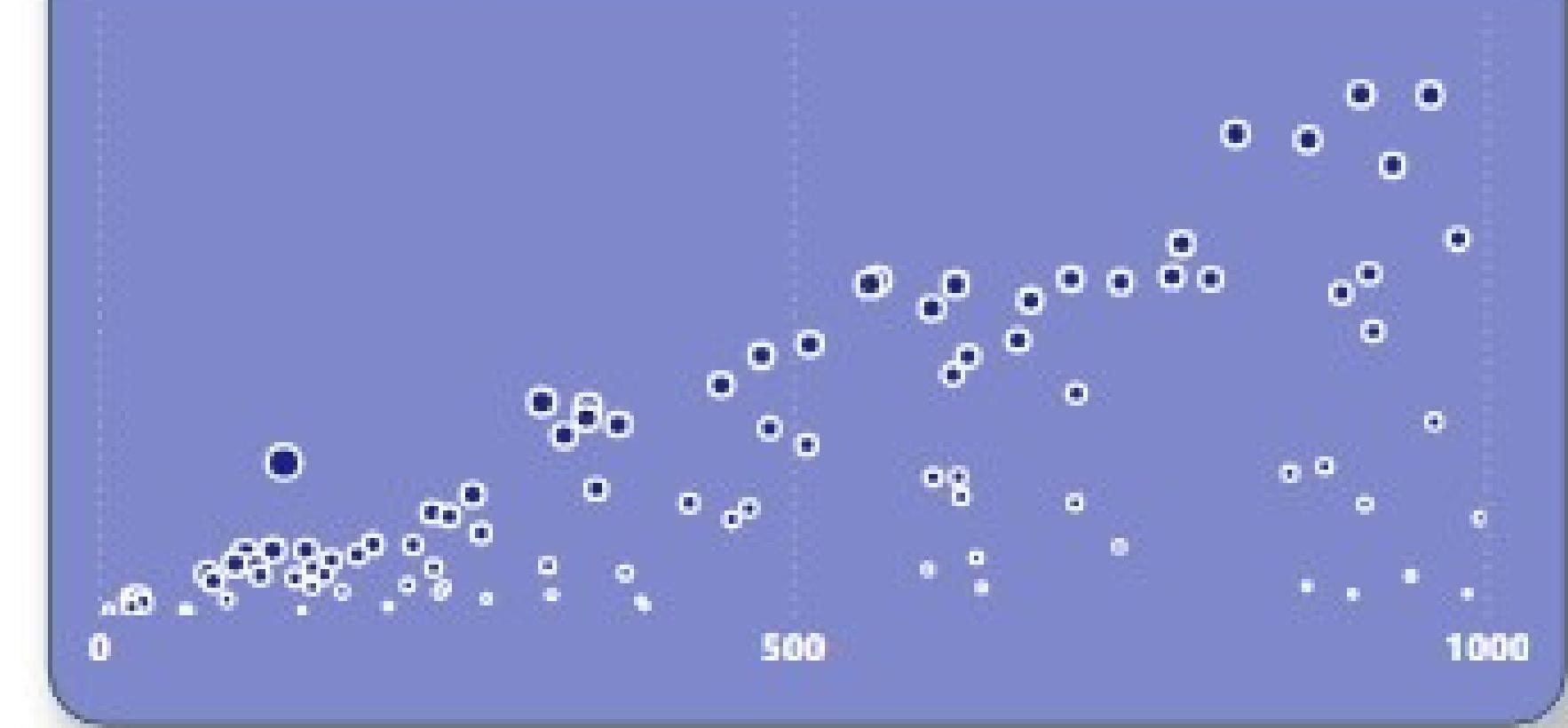
Revenue & Sales Insights

Low Margin Items

High volume,
low revenue SKUs.



Sales Volume vs Revenue by SKU



Revenue & Sales Insights

Leadership can be found in many forms: through strong communication, reliability, creativity, or a willingness to help others. Leaders are not just the loudest voices—they are those who inspire progress and take action for the greater good.



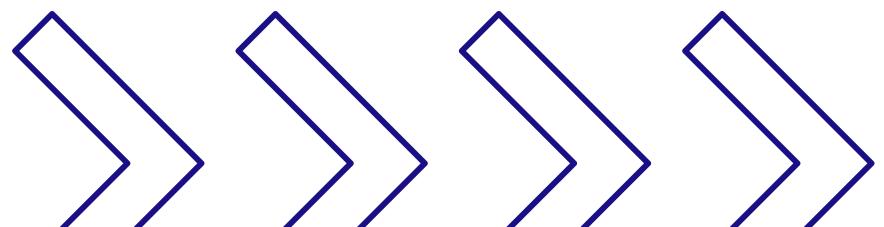
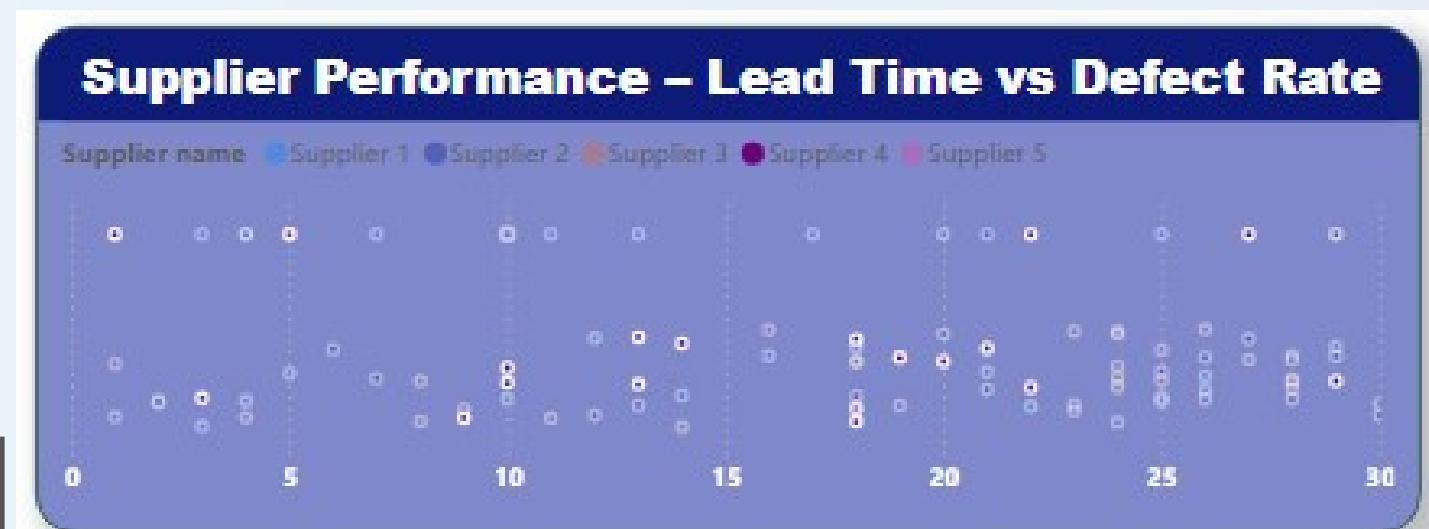
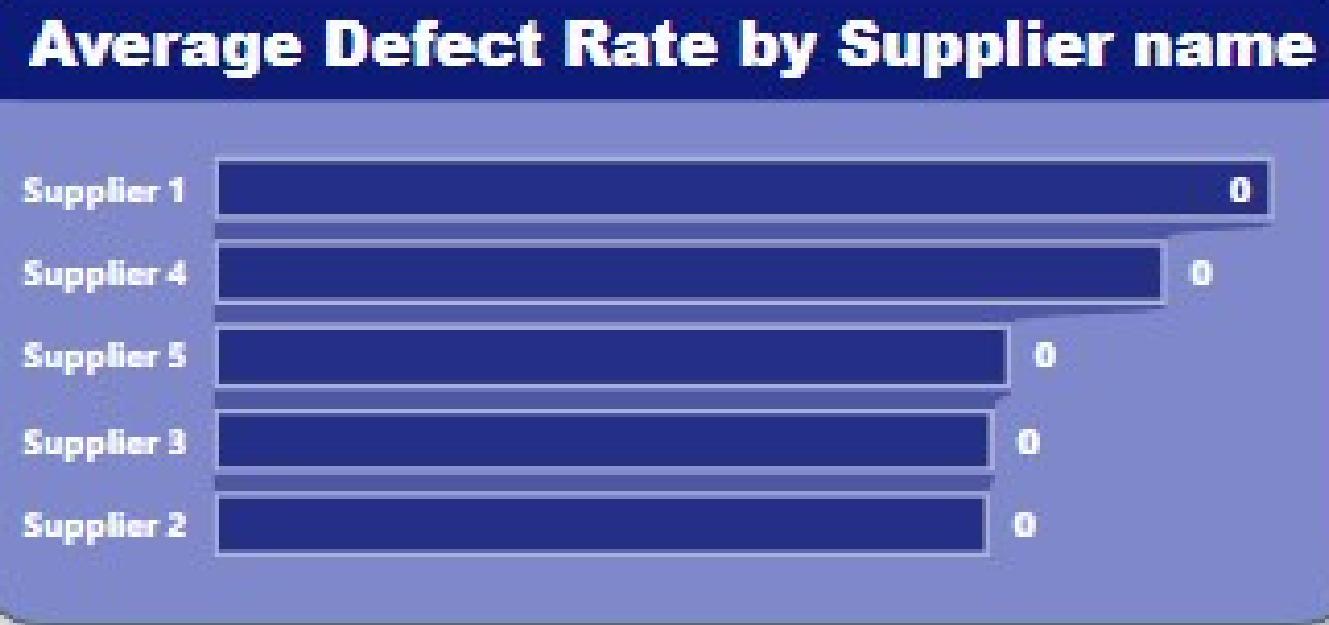
⚙️ Supplier & Quality Insights

Supplier Analysis:

- Supplier 3 → best lead time & lowest defect rate
- Supplier 5 → slow delivery, higher defects

Lead Time vs Defect Rate:

Negative correlation — faster suppliers = fewer defects.





Inventory & Logistics

Stock Violations:
Frequent in fast-moving SKUs
Need dynamic restocking system

Shipping Cost Insights:
Fast delivery costs +25% more
Optimize cost-speed balance





Forecasting Insights

Revenue Forecast:

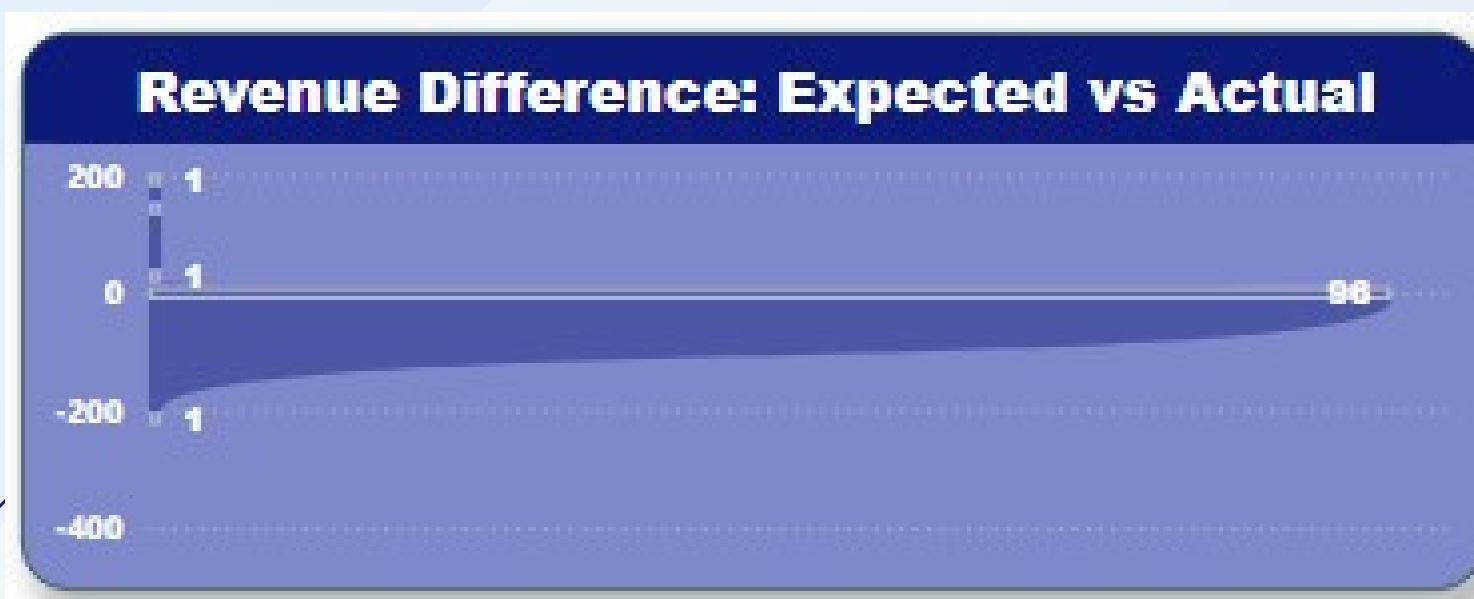
Gradual increase next quarter 

Stock Forecast:

Risk of shortage if demand continues rising.

Supplier Trend:

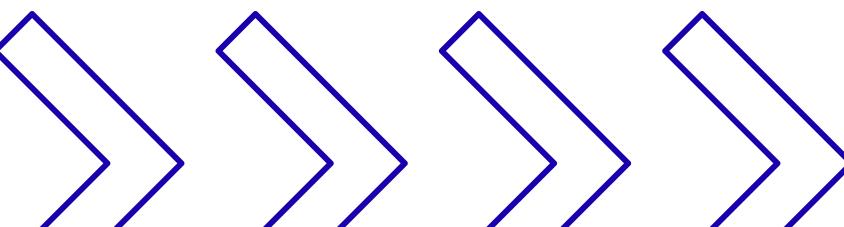
Lead time improving slightly, defect stable.





Strategic Recommendations

- Automate dashboards for real-time tracking.
- Prioritize top suppliers with low defect rates.
- Optimize stock based on forecast demand.
- Review pricing of low-margin items.
- Reduce high shipping cost routes



Thank You

Questions & Discussion



Team Members:

- **Basant Mohamed Reda El-Samahy**
- **Mostafa Mohamed Moharam**
- **Ahmed El-Sayed Ahmed Fouda**
- **Mohamed El-Sayed Mohamed El-Badawy**
- **Sameh Sobhy Ali Abdelhady**
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