



POWER BI SUPPLY CHAIN PROJECT



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01. INTRODUCTION

- This project analyses supply chain data to provide clear insights into supplier performance, product quality, inventory movement, and overall operational efficiency. Using interactive Power BI dashboards, the report highlights key metrics (KPIs), trends, and patterns that support informed decision-making.
- The presentation summarises the most important findings and visualisations, helping stakeholders identify strengths, address challenges, and optimise the supply chain process.

01. INTRODUCTION

01. DATA
COLLECTION

03. DATA
ANALYSIS

02. DATA
CLEANING

04. DATA
VISUALIZATION



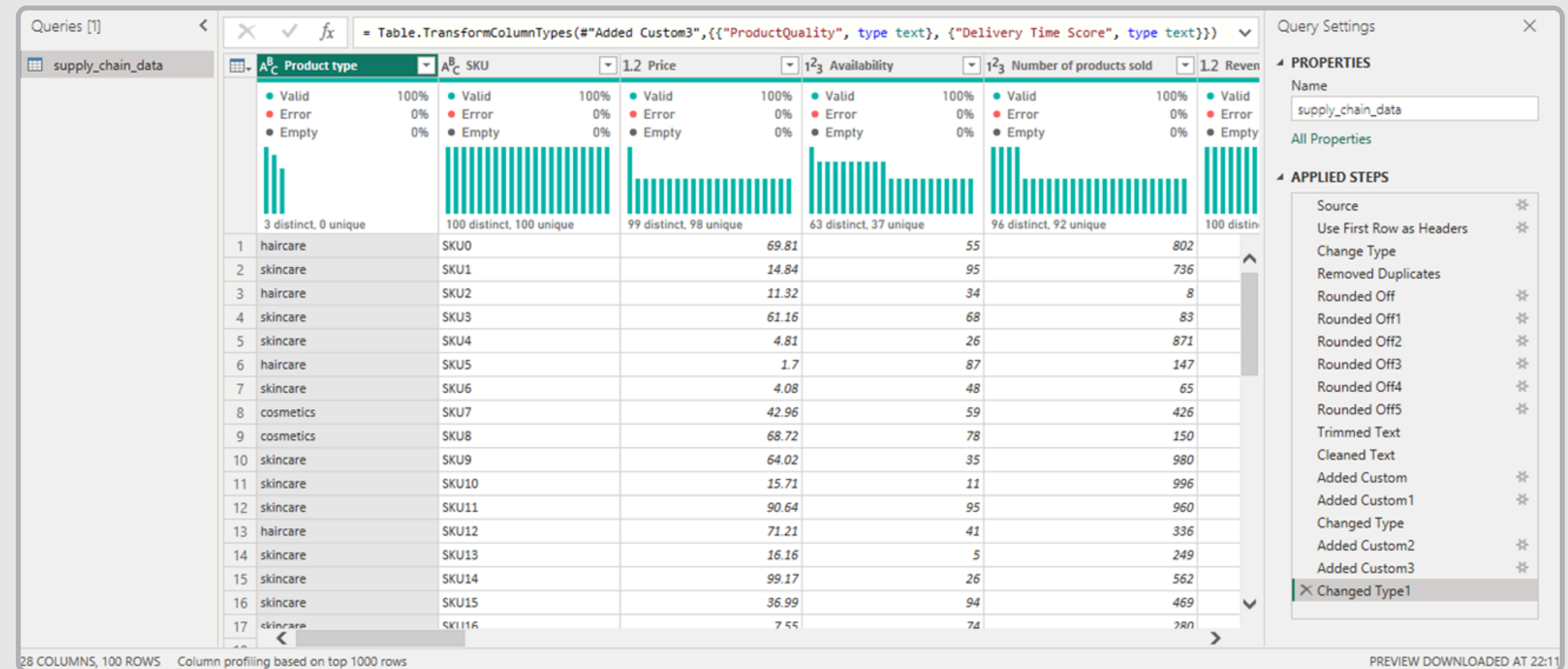
02.

DATA CLEANING AND NORMALIZATION

- Data Cleaning is the first step in the project. And in my team's opinion, the data cleaning process is the most important step.
- Cleaned data is essential for building high-quality insights.

02.

DATA CLEANING AND NORMALIZATION



Power BI's Power Query was used to clean and prepare the data by removing duplicates, fixing data types, handling missing values, and standardising fields.



03. QUESTIONS AND KPIS METRICS



Data Overview

The dataset contains 100 records and 24 columns covering key aspects of the supply chain. Data completeness is 100% (no missing values).

Main categories include:

- Products
- Inventory & Orders
- Logistics
- Suppliers & Manufacturing
- Financial & Cost Data
- Customer Info

Key Performance Indicators (KPIs)

- Total Revenue
- Top 5 Products by Revenue
- Average Defect Rate per Supplier
- Manufacturing Efficiency
- Inventory Turnover Ratio
- Average Shipping Cost per route
- On-Time Delivery Rate Quality Control KPIs
- Defect Rate
- Inspection Pass Rate
- Total Supply Chain Cost



Overview

Total Profit
572.32K

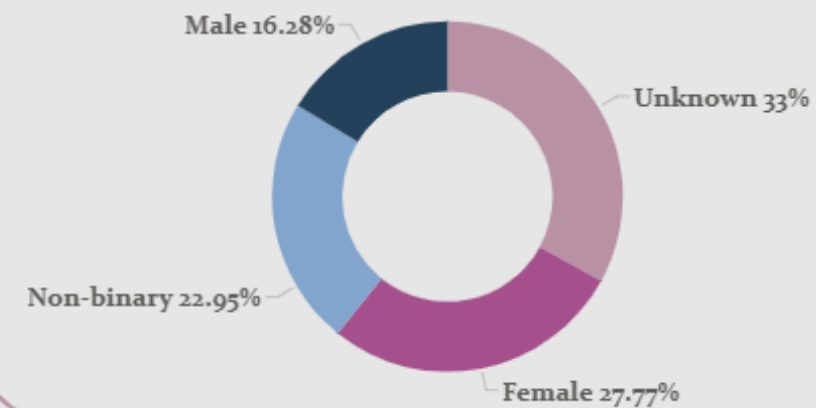
Total suppliers
5

No. of Products
100

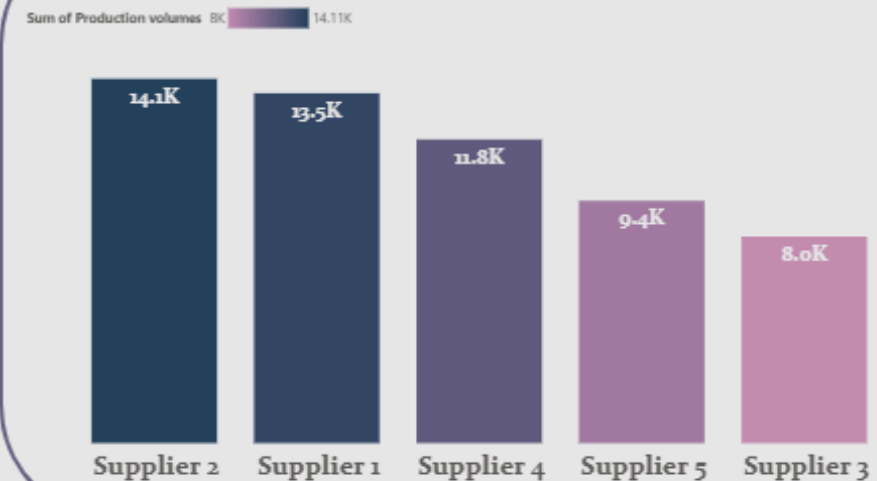
No. of categories
3

No. of Carriers
3

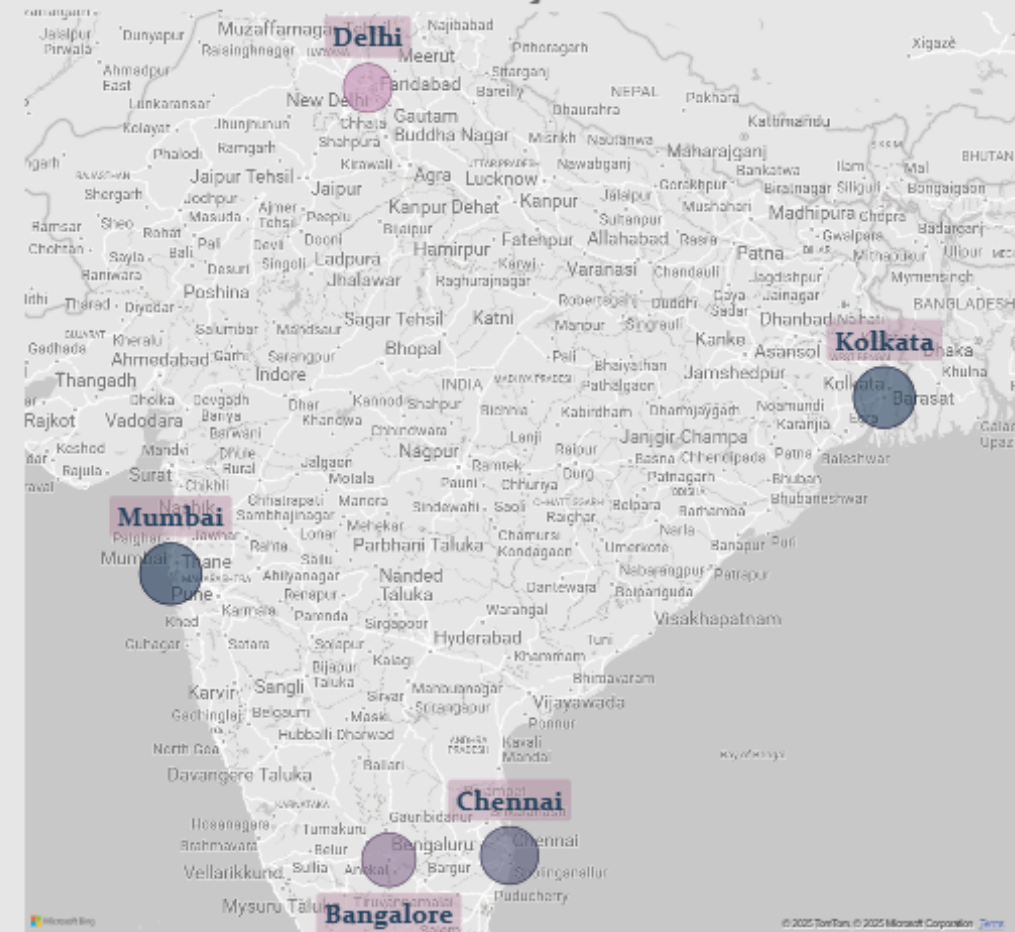
Products bought by Customer Demographics



Suppliers Production Volume



Revenue by Location



04. CHARTS AND DASHBOARDS



Products Insights

Total COGS

4.73K

Stock Balance

5K

Inventory Turnover

9.65

Reorder Frequency

1.03

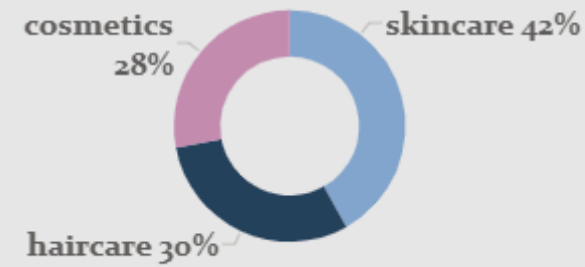
Inspection Pass rate

0.23

Avg. Defect rate

2.28

Profit by Product Type



Top 5 products in Revenue

SKU51	9,866.47
SKU38	9,692.32
SKU31	9,655.14
SKU90	9,592.63
SKU2	9,577.75

Bottom 5 products in Revenue

SKU69	1,752.38
SKU57	1,605.87
SKU78	1,292.46
SKU86	1,229.59
SKU59	1,061.62

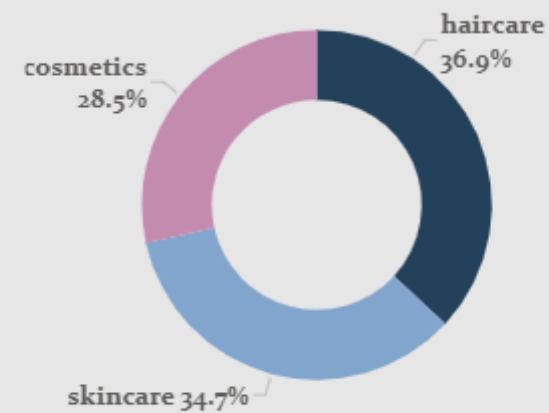
Products' SKU

All

Products' Type

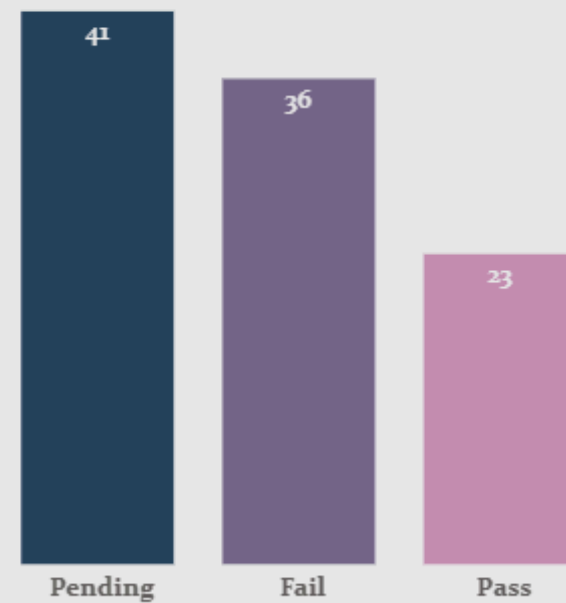
All

Avg. Defect Percentage by Type



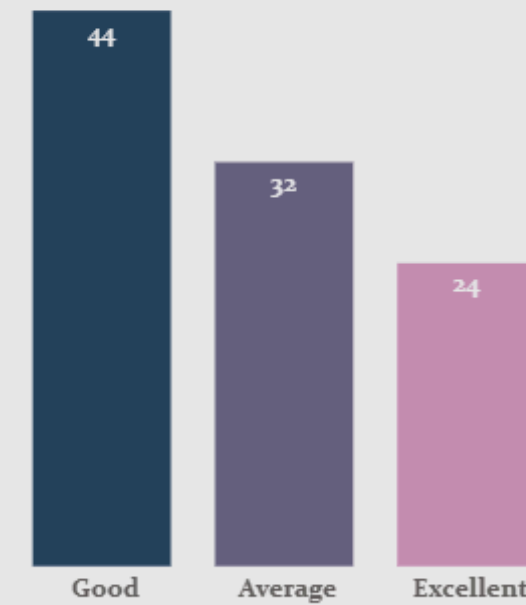
Inspection results by Product Count

Sum of Production volumes 12.61K 25.32K



Products' Quality

Sum of Production volumes 12.69K 24.5K



Overview

Suppliers
&
Shipping

04. CHARTS AND DASHBOARDS



Suppliers & Shipping Insights

Avg. Shipping Cost

5.55

On Time Shipping %

86%

Manufacturing Efficiency

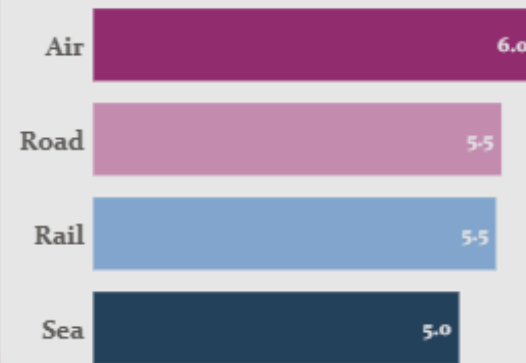
38.45

Total Production volume

57K

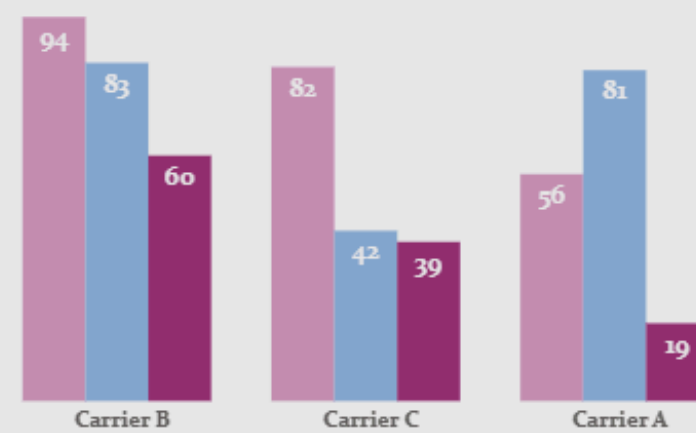
Avg. Cost of Transportation Mode

Sum of Production volumes: 9.04K - 16.28K

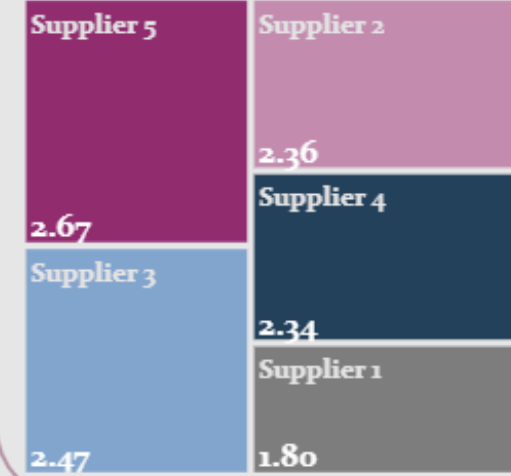


Shipping Carriers' Cost by Routes

Route A Route B Route C

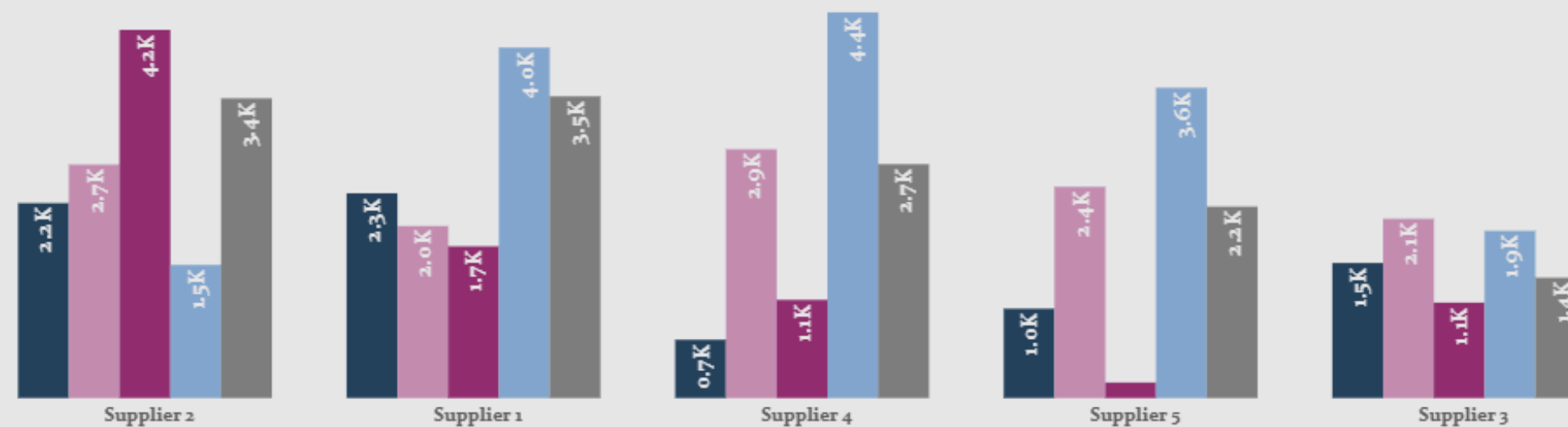


Suppliers' Avg. Defect rate



Production Volume by Supplier and Location

Bangalore Chennai Delhi Kolkata Mumbai



04. CHARTS AND DASHBOARDS

Overview

Products

THANK YOU

