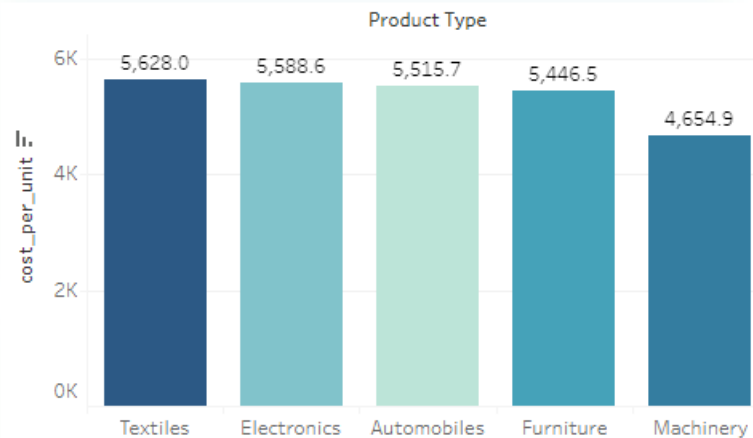# Enhancing Manufacturing Efficiency Through Data-Driven Insights

Employee Hirings by Department over time

Hire Date
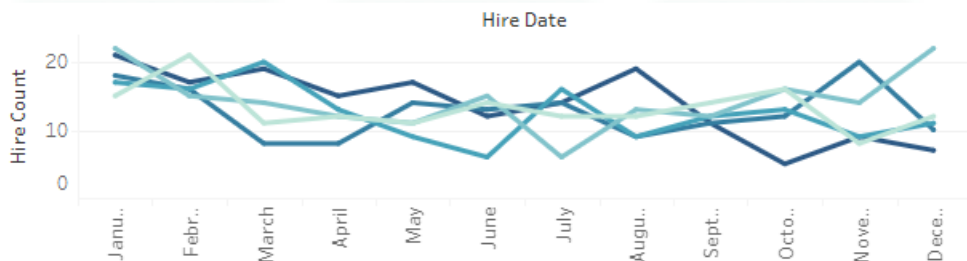
Cost Per Unit by Product Types

Product Type

Textiles	Electronics	Automobiles	Furniture	Machinery
5,628.0	5,588.6	5,515.7	5,446.5	4,654.9

Cluster Analysis for Employee Performance

- Low Income Low Rating
- Avg Income High Rating
- Low Income High Rating
- High Income Avg Rating
- Low Income Avg Rating
- Avg Income Low Rating
- High Income High Rating
- High Income Low Rating
- Avg Income Avg Rating
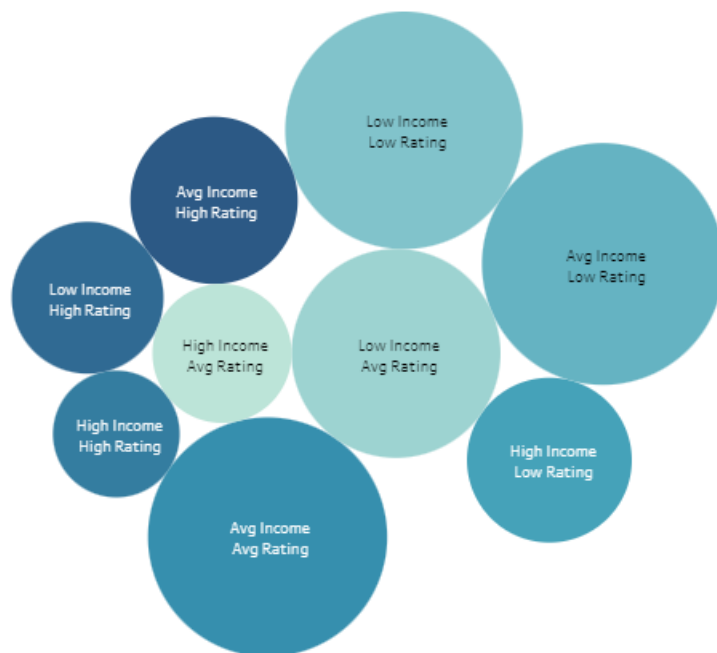
Product Type Distribution

- 21.300% Textiles
- 21.000% Automobiles
- 20.700% Electronics
- 20.000% Furniture
- 17.000% Machinery

Filters

- **Department**
  (All) ▼
- **Month, Year of Hire Date**
  (All) ▼
- **Country**
  (All) ▼
- **Year of Production Date**
  (All) ▼

Comprehensive Insights: Employee Data Analysis
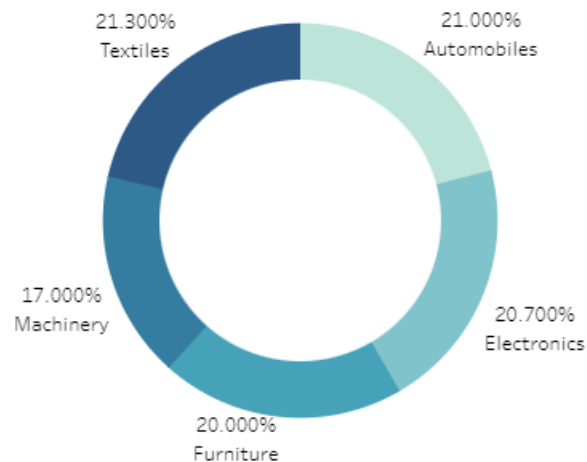
Department

(All) ▼

Country Of Operation

(All) ▼

Warehouse Location

(All) ▼

Performance Rating by Department

Logistics 5.27	Quality Control 4.8	Sales 4.49
Production 5.25	Human Resources 4.63	
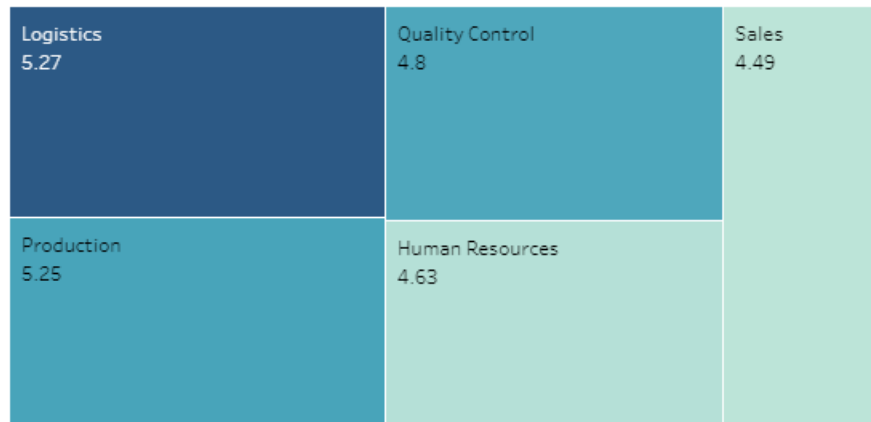
Department Analysis by Performance Rating and Salary

Department (Training cleaned.csv)

Avg. Performance Rating / Salary

Human Resources — Logistics — Production — Quality Control — Sales

Employee Tenure by Department

Department

3.42	3.39	3.37	3.36	3.33
Quality Control	Human Resources	Sales	Production	Logistics

avg_tenure
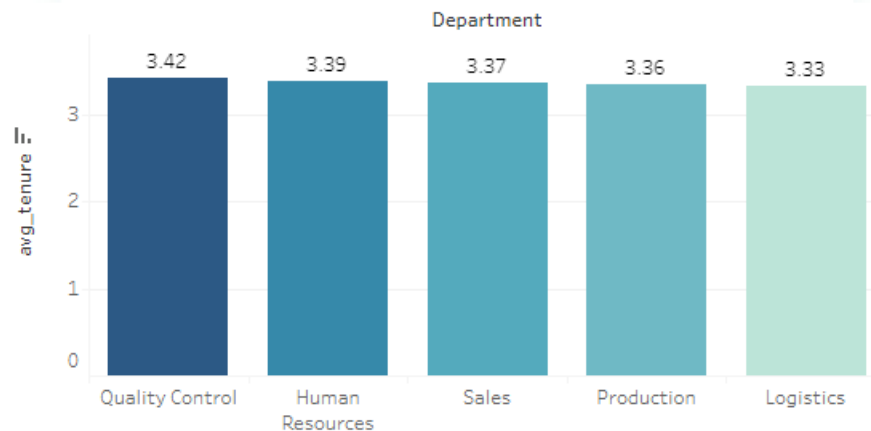
Predictive Analysis for Salary

Avg. Salary

60K, 40K, 20K, 0K

2020 Q2 — 2020 Q4 — 2021 Q2 — 2021 Q4 — 2022 Q2

Quarter of Hire Date

Comprehensive Insights: Production Data Analysis

Products by Production Cost

Product Type

1,264,834	Textiles
1,174,776	Automobiles
1,137,567	Electronics
1,038,520	Furniture
954,771	Machinery

Production Cost axis: 1000K, 500K, 0K
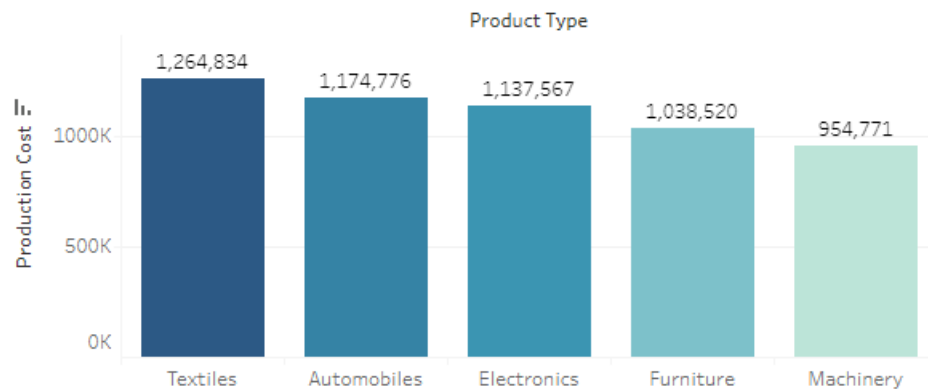
Production and Warehouse Analysis

Production Date

Distinct count of Product ID

Values: 62, 59, 52, 54, 48, 47, 35, 40, 38, 30

Years: 2023, 2024, 2025
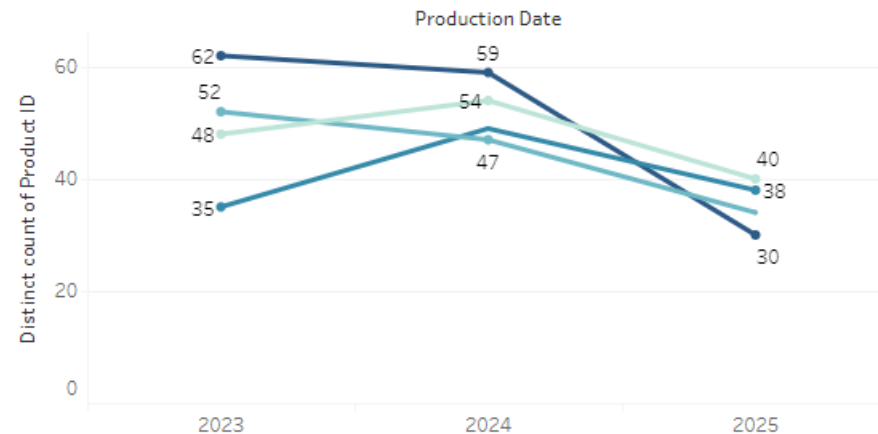
Production Cost Trend Analysis

Production Cost axis: 200K, 150K, 100K, 50K, 0K

Quarter of Production Date: 2023 Q2, 2023 Q4, 2024 Q2, 2024 Q4, 2025 Q2

Correlation Analysis

Production Cost axis: 20K, 15K, 10K, 5K, 0K

Quantity Produced: 0, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000

Warehouse Location
(All)

Country Of Origin
(All)

Year of Production Date
(All)