

\$58.21K

Total Costs

38.98%

Inspection Pass Rate %

48.40%

Stock Availability %

575

Total Shipments

Supclair

Clarity in Every Chain

In today's competitive business environment, efficient inventory management, supplier evaluation, and logistics optimization are critical for maintaining a seamless supply chain. This project aims to leverage data analytics and visualization tools to gain actionable insights into stock availability, sales performance, supplier efficiency, and transportation logistics.

Inventory and Costs

Supplier and
Manufacturing I

Supplier and
Manufacturing II

Sales Overview

Insights

\$577.6K

Total Revenue

\$58.21K

Total Costs

\$52.9K

General Costs

\$555

Total Shipping Costs

\$4.7K

Manufacturing Cost

48.40%

Stock Availability %

575

Total Shipments

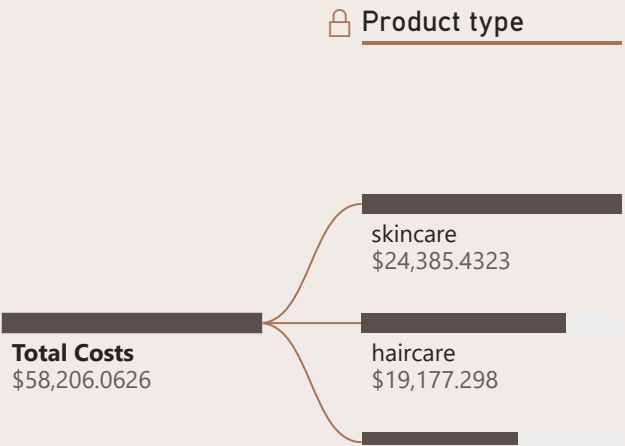
Products with Stock Availability less than 20%

Which products have critically low stock?

| SKU | Stock Availability % | Total Order Quantity |
|-------|----------------------|----------------------|
| SKU45 | 1.00% | 52 |
| SKU52 | 1.00% | 11 |
| SKU29 | 3.00% | 67 |
| SKU13 | 5.00% | 48 |
| SKU37 | 5.00% | 21 |
| SKU43 | 6.00% | 85 |
| SKU26 | 9.00% | 48 |
| SKU81 | 9.00% | 8 |

Total Expenses by Product type

Which product type has the highest expense?



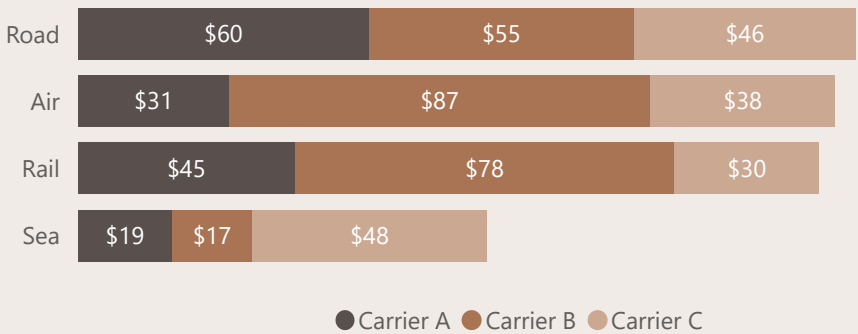
General costs by Products

Which product needs the highest investment?



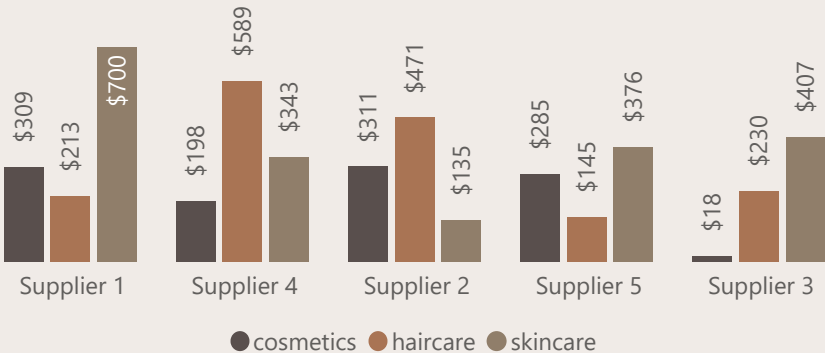
Shipping Costs by Shipping Carriers & Transportation Modes

Which transportation mode is the most expensive?



Manufacturing costs by Suppliers and their Products

Who's spending the most to bring beauty to life?



15.96

Average Order Lead time

17.08

Average Supplier Lead Time

14.77

Average Manufacturing Lead Time

36

High Defect Count

38.98%

Inspection Pass Rate %

38.45%

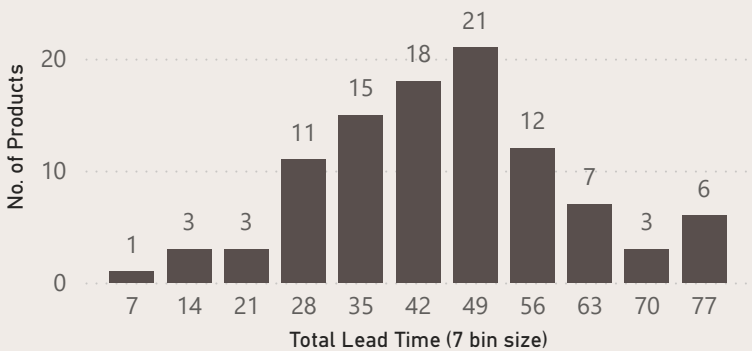
Manufacturing Efficiency

1.23K

Manufacturing Waste Rat...

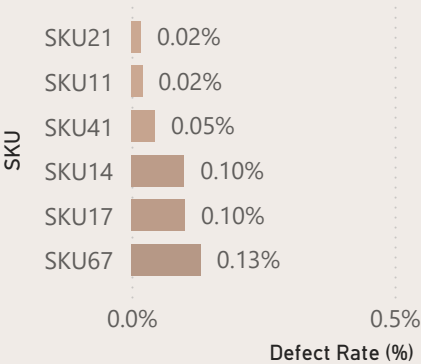
Total Lead Time Distribution

How often do different lead times occur?



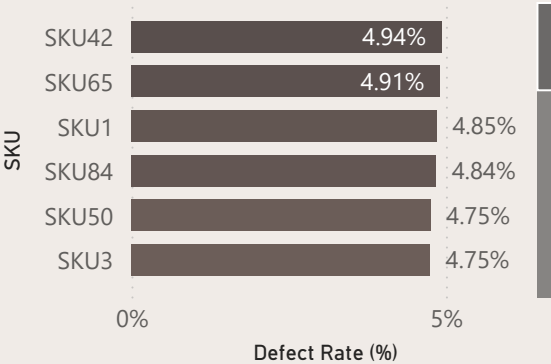
Least 20 SKU with Defect Rates

Which products have the fewest defects?



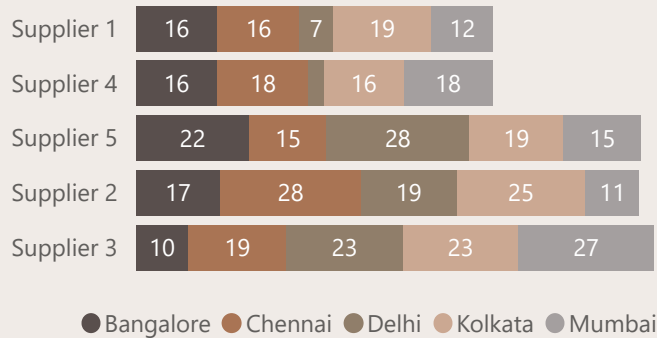
Highest 20 SKU with Defect Rates

Which products need quality improvements?



Average Supplier Lead Time by Supplier & Location

Which suppliers delivers the raw material needed the fastest?



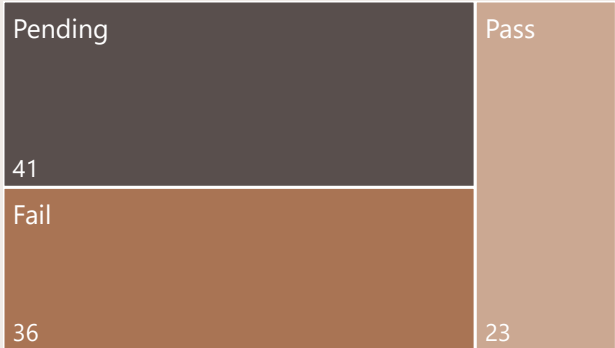
Supplier Performance

Which supplier helped us grow?

| Supplier name | Supplier Performance |
|---------------|----------------------|
| Supplier 1 | ● Acceptable |
| Supplier 2 | ✓ Good |
| Supplier 3 | ✗ Bad |
| Supplier 4 | ● Acceptable |
| Supplier 5 | ✓ Good |

Products count by Inspection results

How many products passed or failed inspection?



15.96

Average Order Lead time

17.08

Average Supplier Lead Time

14.77

Average Manufacturing Lead Time

36

High Defect Count

38.98%

Inspection Pass Rate %

38.45%

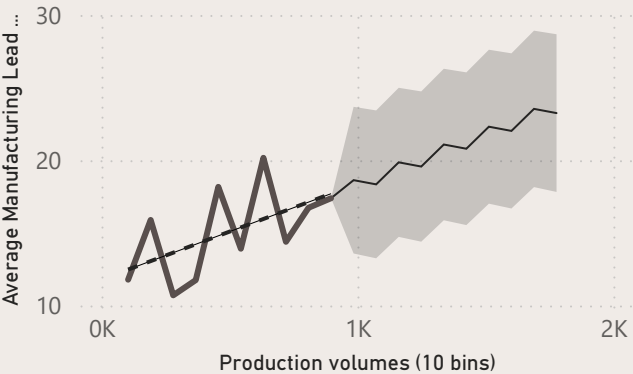
Manufacturing Efficiency

1.23K

Manufacturing Waste Rat...

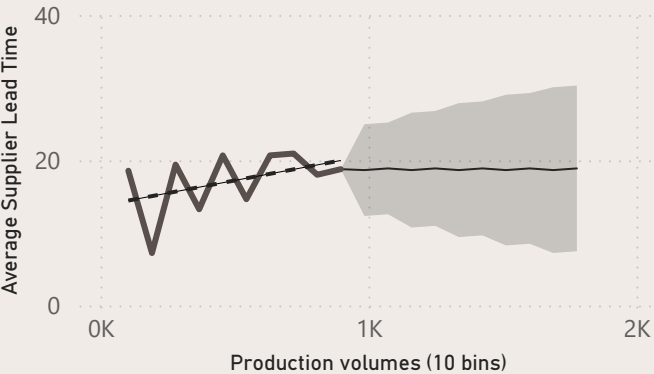
Manufac. Lead time vs. Production Volume

Does production size affect manufacturing speed?



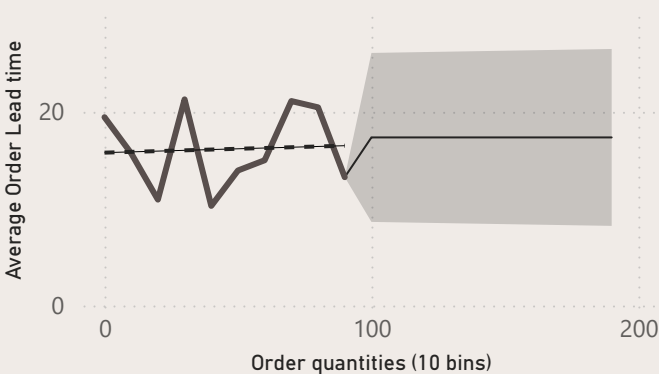
Suppler Lead time vs. Production Volume

Does production volume slow down suppliers?



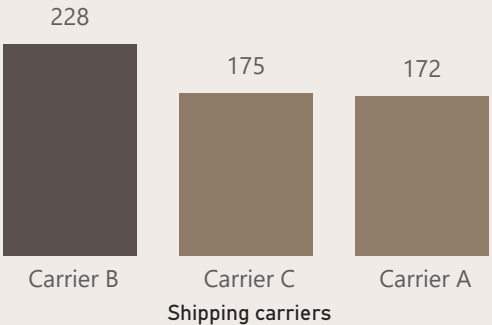
Order Lead time vs. Order quantities

Do bigger orders take longer?



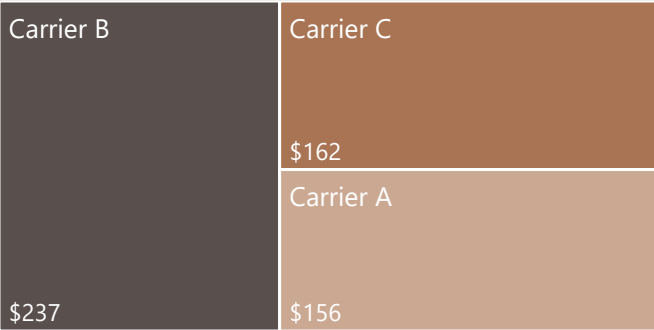
Total Shipments by Shipping carriers

Who Ships Most?



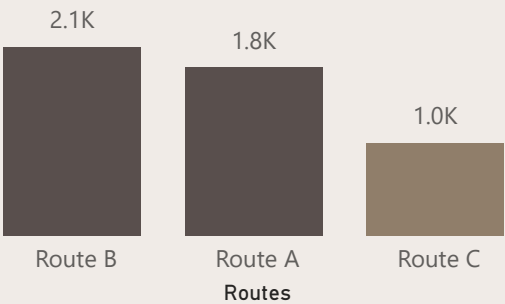
Total Shipping Costs by Shipping carriers

Who Costs Most to Ship?



Total Order Quantity by Routes

Which Route Has the Most Orders?





\$577.6K

Total Revenue

\$58.21K

Total Costs

\$519.4K

Total Profit

46K

Total Sold Quantity

4922

Total Order Quantity

575

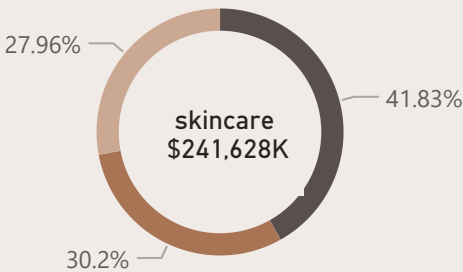
Total Shipments

\$12.5

Average Selling Price

Total Revenue by Product type

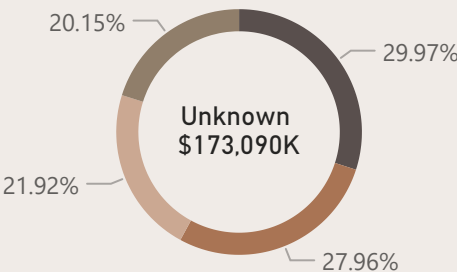
Which Product type makes the most Revenue?



Product type ● skincare ● haircare ● cosmetics

Total Revenue by Gender

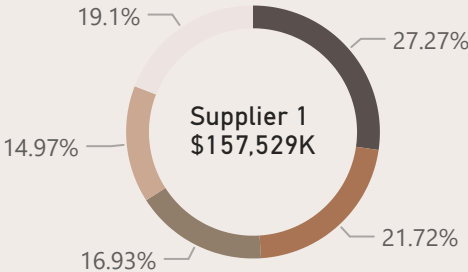
Which gender brings in the most revenue?



Gender ● Unknown ● Female ● Male ● Non-binary

Total Revenue by Supplier

Which supplier drives the most revenue?



Supplier ● Supplier 1 ● Supplier 2 ● Supplier 3 ● Supplier 4 ● Supplier 5

Price and No. of Products Sold Relationship

Does a Lower Price Guarantee Higher Sales?



Top 20 profitable Products?

Which products generate the highest profit?



Analytics and Insights

Key Observations

- Supplier 1 & 4 deliver raw materials fastest.
- Supplier 3 lags in speed and quality.
- High defect rates in SKUs 42 & 65 (>4.9%).
- 41 products pending inspection; 36 failed.
- Manufacturing efficiency is low (38.45%) with 1.23K units wasted.

Key Observations

- Lead time rises with higher production volumes.
- Carrier B is the most used—and most expensive.
- Route B has the highest order volume.

Key Observations

- Total revenue: \$577.6K, with ~90% profit margin.
- Skincare leads in revenue (42%).
- “Unknown” gender segment generates most revenue (29.97%).
- Supplier 1 performs best (27.3% revenue); Supplier 4 underperforms (14.97%).

Key Observations

- SKUs like 45 & 52 are nearly out of stock despite demand.
- Skincare is the most expensive category (\$24.4K).
- Air shipping via Carrier B is costliest (\$87).
- Supplier 1 has highest manufacturing cost; Supplier 3 is most efficient.

Supplier & Manufacturing I

Recommendations:

- Address quality issues with Supplier 3.
- Speed up inspection to reduce backlog.
- Add in-line quality checks to catch defects early.
- Investigate root causes of high waste and defects.

Supplier & Manufacturing II

Recommendations:

- Optimize batch sizes to manage lead time.
- Re-evaluate Carrier B costs—consider Carrier A or C.
- Strengthen infrastructure on Route B.

Sales Overview

Recommendations:

- Focus marketing on skincare.
- Improve demographic data accuracy.
- Adjust pricing based on product value.
- Investigate Supplier 4 performance issues.

Inventory & Costs

Recommendations:

- Replenish high-demand, low-stock SKUs.
- Review skincare cost drivers.
- Consider shifting from Carrier B to cheaper options.
- Negotiate or reduce reliance on costly Supplier 1.
- Leverage Supplier 3 for cost-effective production.