# Supply Chain Analysis

**Summary**

The supply chain is the network of production and logistics that is involved in producing and delivering goods to customers. Supply chain analysis involves examining the various components of a supply chain to understand how to enhance its efficiency and create more value for customers.

**Analysis**

I. Descriptive Analysis:

**A computer screen shot of a computer screen

Description automatically generated**

**Output**

**A screen shot of a computer

Description automatically generated**

A screenshot of a computer screen

Description automatically generated

II. Relationship between the price of the products and the revenue generated:

**A screen shot of a computer

Description automatically generated**

**Output:**

**A graph with lines and dots

Description automatically generated**

**Inference:**

The company generates more revenue from skincare products, and as the prices of these products increase, their revenue also grows.

III. Sales by product type:

A screen shot of a computer code

Description automatically generated

**Output:**

A pie chart with different colored circles

Description automatically generated

**Inference:**

Skincare products account for 45% of the business, while haircare products contribute 29.5%, and cosmetics make up 25.5%.

IV. Total revenue generated from shipping carriers:

A screen shot of a computer code

Description automatically generated

**Output**

A graph of blue squares

Description automatically generated with medium confidence

**Inference:**

The organization utilizes three transportation carriers, with Carrier B notably contributing to increased revenue generation.

V. Average lead time and Average Manufacturing Costs for all products of the company

A screen shot of a computer code

Description automatically generated

**Output:**

**A black screen with white text

Description automatically generated**

VI. Revenue generated by each SKU:

**A screen shot of a computer

Description automatically generated**

**Output:**

**A graph with blue lines

Description automatically generated**

VII. Stock levels of each SKU

**A screen shot of a computer code

Description automatically generated**

**Output:**

**A graph with blue lines

Description automatically generated**

VIII. Order quantity of each SKU

**A computer screen with text

Description automatically generated**

**Output:**

**A graph of blue lines

Description automatically generated**

IX. Cost Analysis

A computer screen with text

Description automatically generated

**Output**

**A blue and white striped background

Description automatically generated with medium confidence**

**Inference:**

Through visualizations, it became apparent that Carrier B contributes more to the company's revenue.

X. Cost distribution by transportation mode

A screen shot of a computer program

Description automatically generated

**Output**

A colorful circle with numbers

Description automatically generated

**Inference:**

The company allocates a larger portion of its transportation budget to road and rail modes for shipping goods.

XI. Average defect rate of all product types

**A screen shot of a computer code

Description automatically generated**

**Output**

**A blue rectangles with white text

Description automatically generated**

Inference:

The rate of defects in haircare products is elevated.

XII. Defect rates by mode of transportation:

A screen shot of a computer code

Description automatically generated

Output

A colorful circle with numbers

Description automatically generated

Inference:

Transportation by road exhibits a higher defect rate, whereas air transportation demonstrates the lowest defect rate.

Conclusion:

Supply Chain Analysis involves examining different elements within a supply chain to enhance its efficiency and generate increased value for customers.