De 🤝 aL

online store

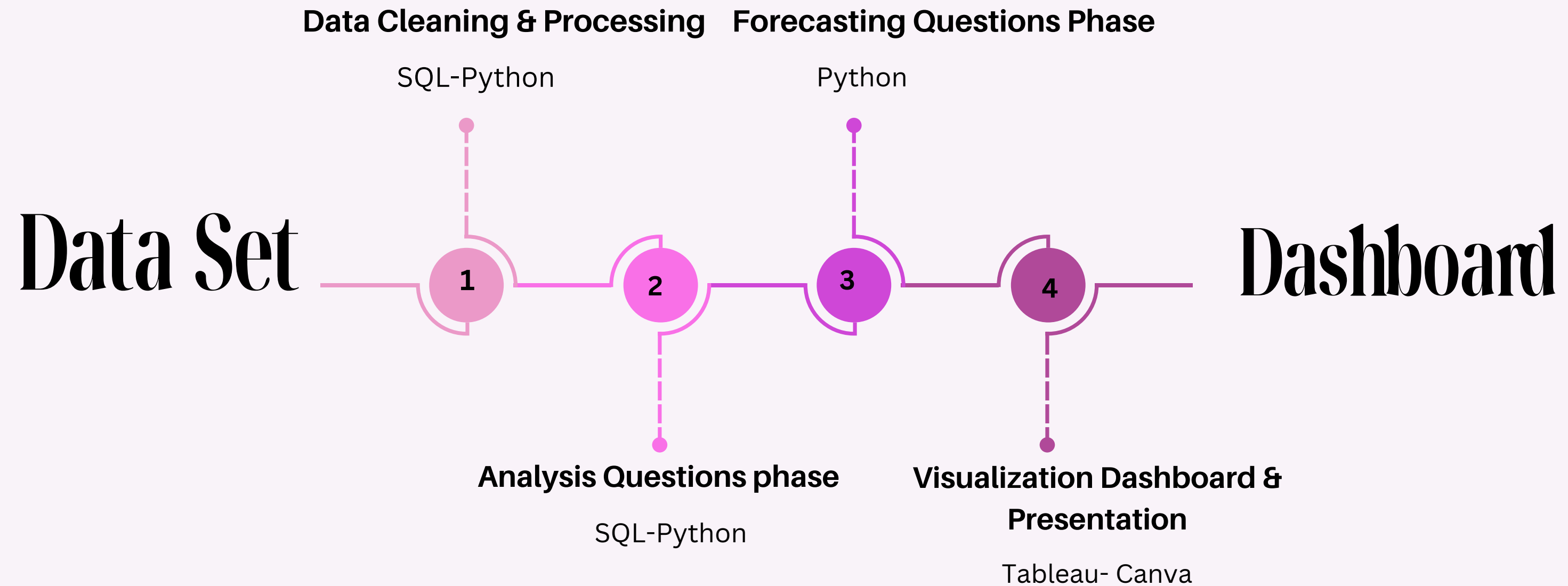# Data Analysis Project for De 🤝 al Store

🔍 Objective:

To analyze key sales metrics, customer demographics, and supplier performance to optimize business strategies and improve decision-making.
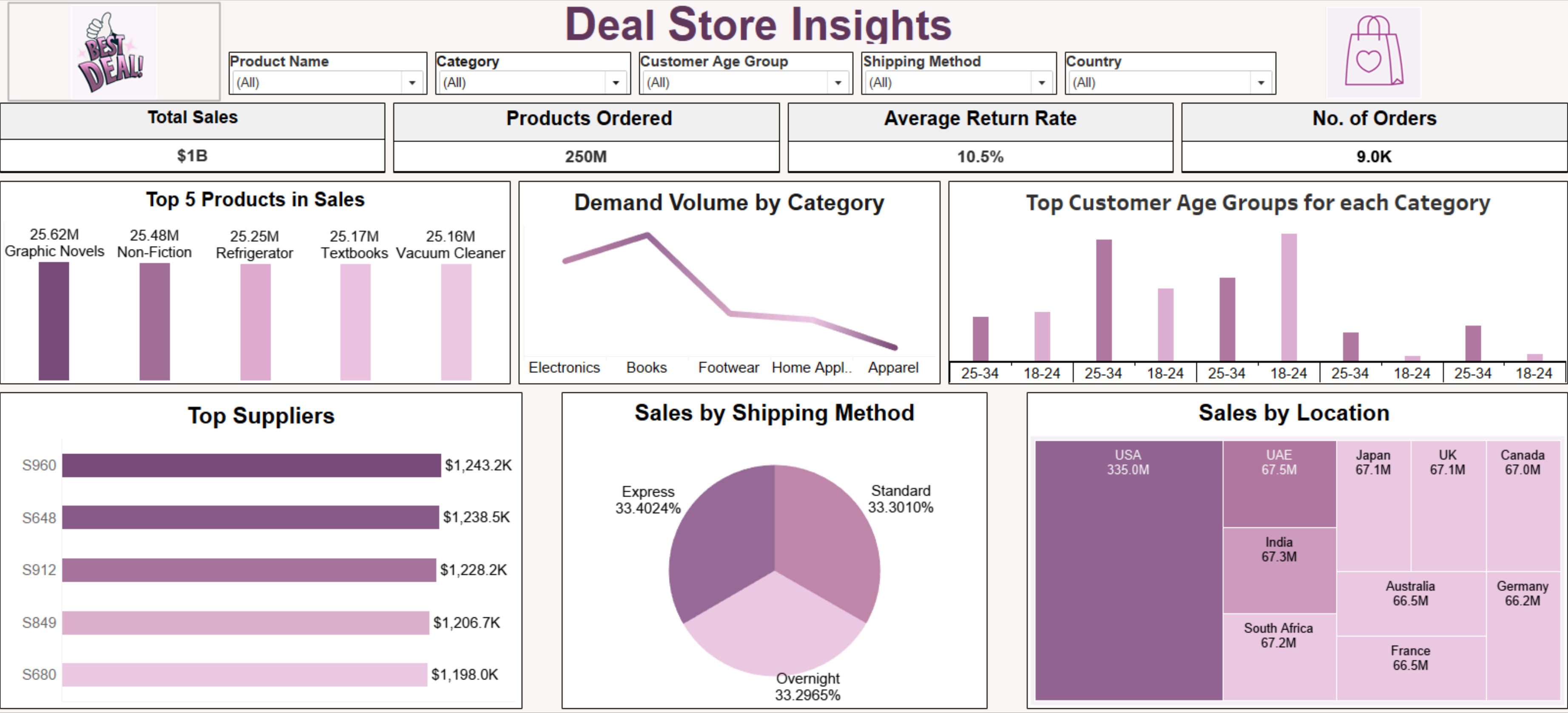
📊 Key Focus Areas:

- Sales Performance – Top products, revenue trends.

- Customer Insights – Age group trends, demand by category.

- Supplier & Shipping Analysis – Efficiency and cost evaluation

🚀 Goal:

To enhance sales strategies, optimize inventory management, and improve customer satisfaction by leveraging data-driven insights.

Data Set

Dashboard

Data Cleaning & Processing

SQL-Python

Forecasting Questions Phase

Python

1

2

3

4

Analysis Questions phase

SQL-Python

Visualization Dashboard & Presentation

Tableau- Canva

Deal Store Insights

Product Name	Category	Customer Age Group	Shipping Method	Country
(All) ▼	(All) ▼	(All) ▼	(All) ▼	(All) ▼

Total Sales	Products Ordered	Average Return Rate	No. of Orders
$1B	250M	10.5%	9.0K

Top 5 Products in Sales

- 25.62M Graphic Novels
- 25.48M Non-Fiction
- 25.25M Refrigerator
- 25.17M Textbooks
- 25.16M Vacuum Cleaner

Demand Volume by Category

Electronics — Books — Footwear — Home Appl... — Apparel

Top Customer Age Groups for each Category

25-34 | 18-24 | 25-34 | 18-24 | 25-34 | 18-24 | 25-34 | 18-24 | 25-34 | 18-24

Top Suppliers

Supplier	Sales
S960	$1,243.2K
S648	$1,238.5K
S912	$1,228.2K
S849	$1,206.7K
S680	$1,198.0K

Sales by Shipping Method

- Express 33.4024%
- Standard 33.3010%
- Overnight 33.2965%

Sales by Location

- USA 335.0M
- UAE 67.5M
- Japan 67.1M
- UK 67.1M
- Canada 67.0M
- India 67.3M
- South Africa 67.2M
- Australia 66.5M
- France 66.5M
- Germany 66.2M

The most Important Insights

1. **Total Sales & Orders:**
   - The total sales amount to $1,004.8M.
   - 250M products were ordered.
   - The total number of orders is 9.0K.

2. **The average return rate is 10.5%, indicating a potential issue with product quality or customer satisfaction.**
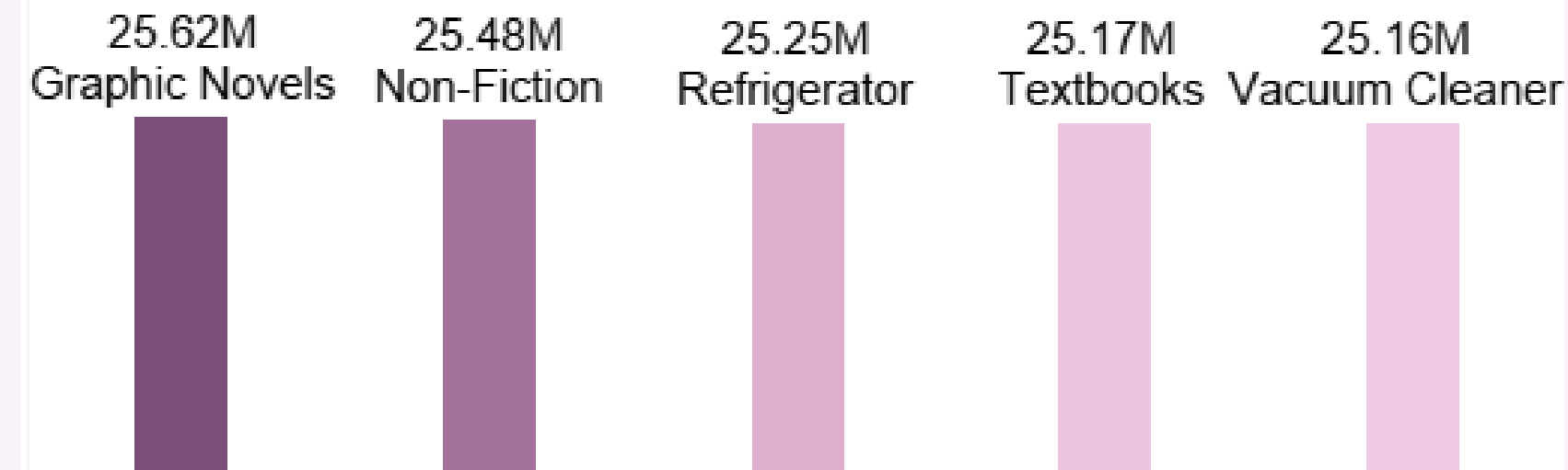
3. **The top 3 products in sales are:**
   - Graphic Novels (25.62M)
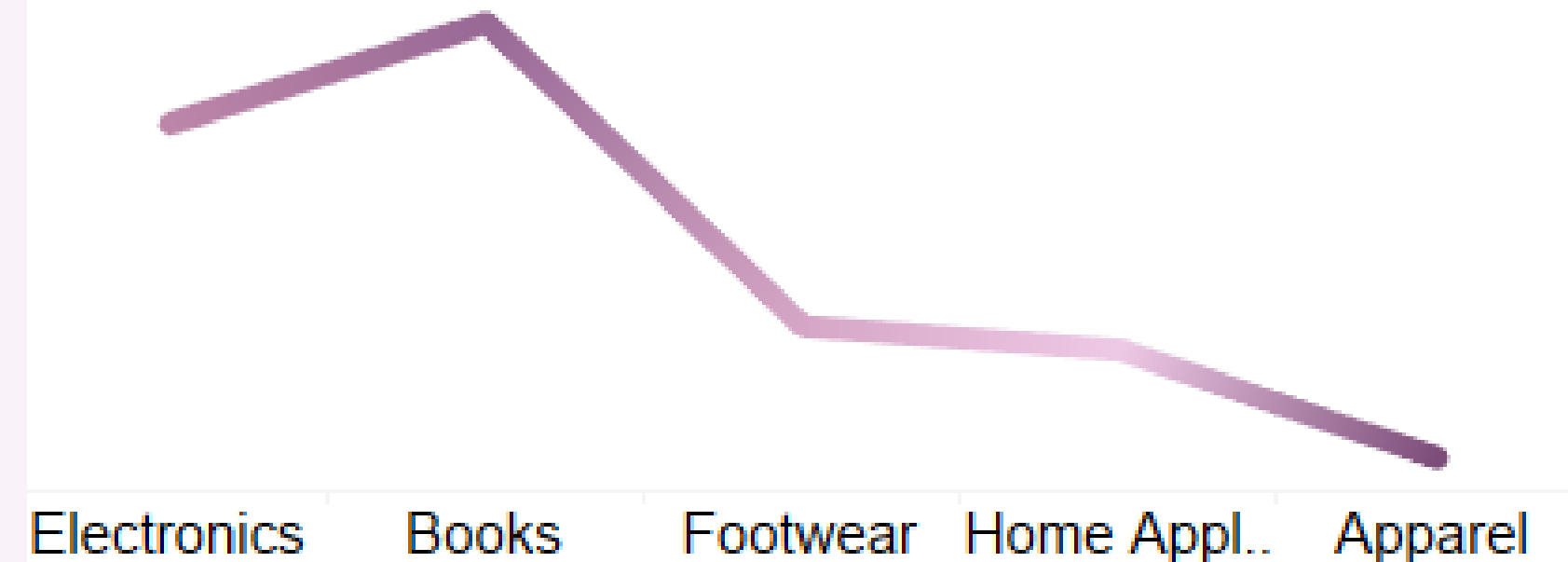   - Refrigerator (25.25M)
   - Vacuum Cleaner (25.16M)

4. **Demand Volume by Category:**
   - Books have the highest demand.
   - Apparel has the lowest demand, indicating potential underperformance in this category.

Top 5 Products in Sales

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Demand Volume by Category

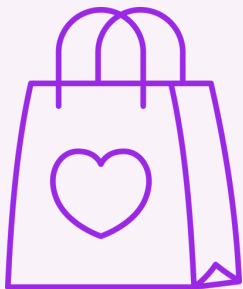Electronics   Books   Footwear   Home Appl..   Apparel

5. Customer Demographics.
- ·The 25-34 age group is the top customer segment across multiple categories.

6. Top Suppliers:
- ·The leading supplier is S960 with $1,243.2K in sales.
- ·Other major suppliers have similar performance, suggesting a competitive supplier market.

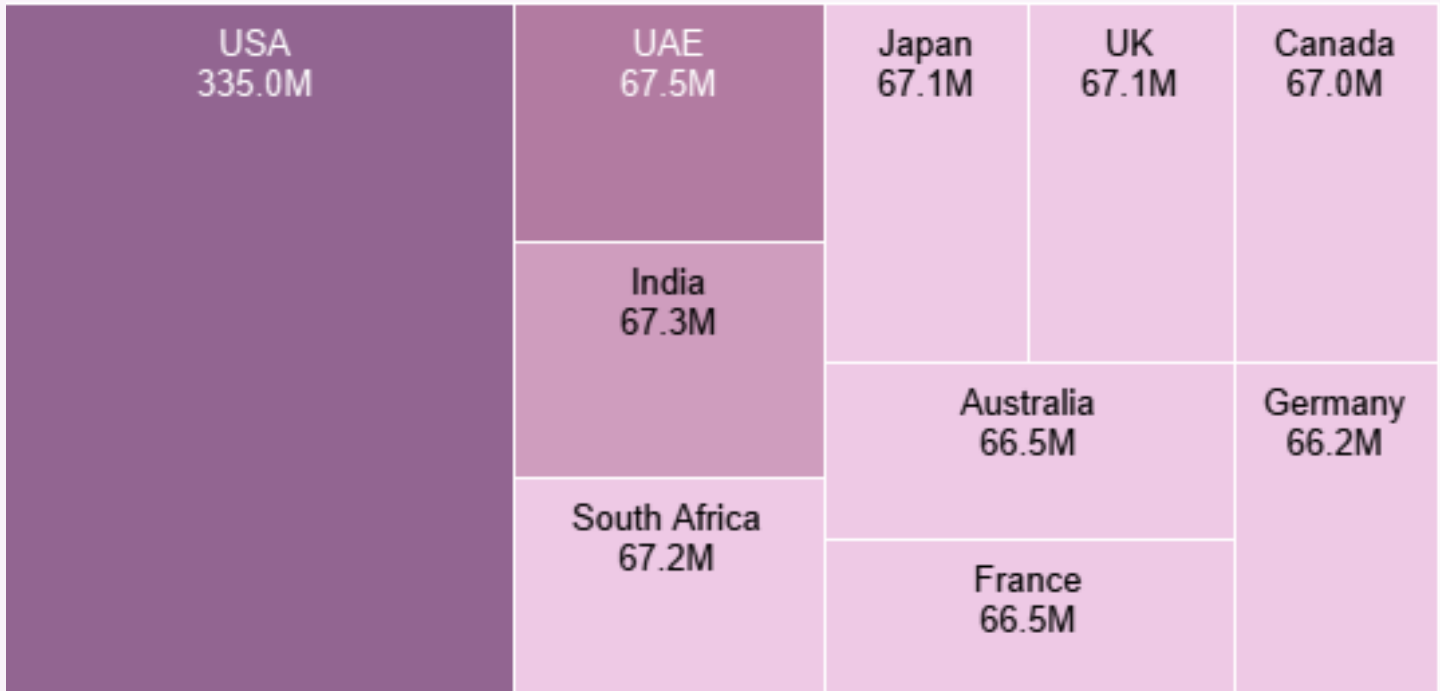## 7. Sales by Location:
- The USA leads in sales with $335M.

8. Sales by Shipping Method:
- Sales are evenly distributed across different shipping methods, with no single method dominating.

Top Suppliers

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UK	67.1M
Canada	67.0M
Australia	66.5M
France	66.5M
Germany	66.2M

action plan

1. Optimize High-Demand Categories

- Expand inventory in Books & Electronics.
- Improve supplier contracts for high-margin products.

2. Enhance Customer Engagement

- Special promotions for the 25-34 age group.
- Offer discounts on underperforming categories.

3. Reduce Return Rate

- Investigate 10.5% return rate causes.
- Improve product descriptions, quality checks & customer support.

4. Strengthen Market Presence

- Expand in the USA, while growing Japan, UK & UAE sales.
- Launch localized campaigns in top international markets.

5. Optimize Logistics & Supplier Relations

- Identify the most cost-effective shipping method.
- Negotiate better terms with top suppliers