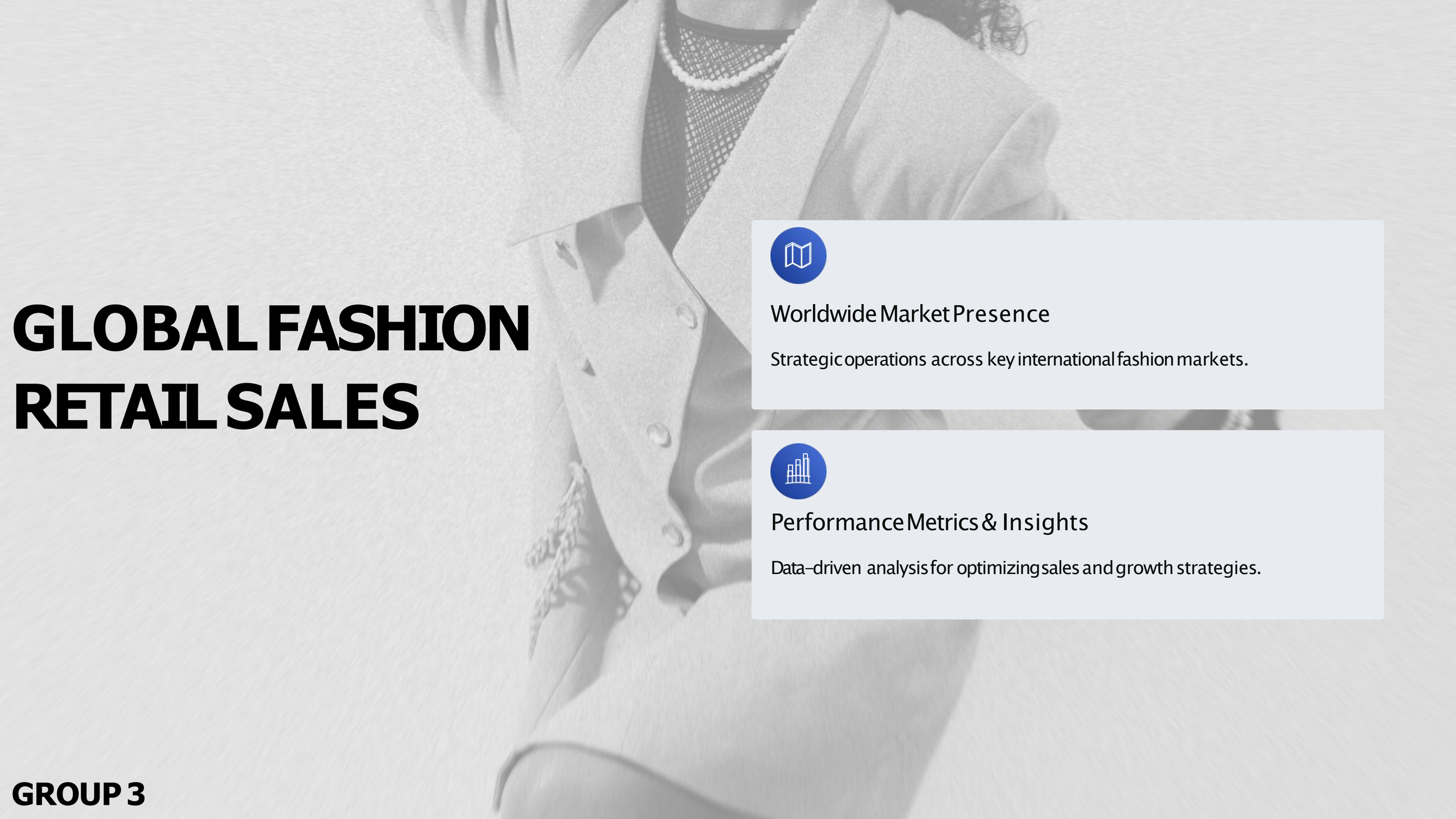


# GLOBAL FASHION RETAIL SALES

### Worldwide Market Presence

Strategic operations across key international fashion markets.

### Performance Metrics & Insights

Data-driven analysis for optimizing sales and growth strategies.

**GROUP 3**

# PROJECT OVERVIEW

**Business Context**

- Global fashion retailer operating across multiple countries and cities
- Objective is to leverage data to improve pricing, promotions, product strategy, and store performance

**Dataset Overview**

- Two years of transaction-level retail data
- Large-scale dataset (100+ MB) with over 1 million records
- Relational structure with six files and linked tables:
  - Transactions, Stores, Products, Customers, Employees, Discounts

**Source:**

- Kaggle - Global Fashion Retail Stores Dataset

# DATA WRANGLING INSIGHTS AND BUSINESS QUESTIONS

## Data Cleaning

- Cleaning was performed using csvstat to analyze column-level statistics and identify missing or inconsistent values.
- Perform necessary cleaning to ensure data integrity and consistency.

## SQL Structure:

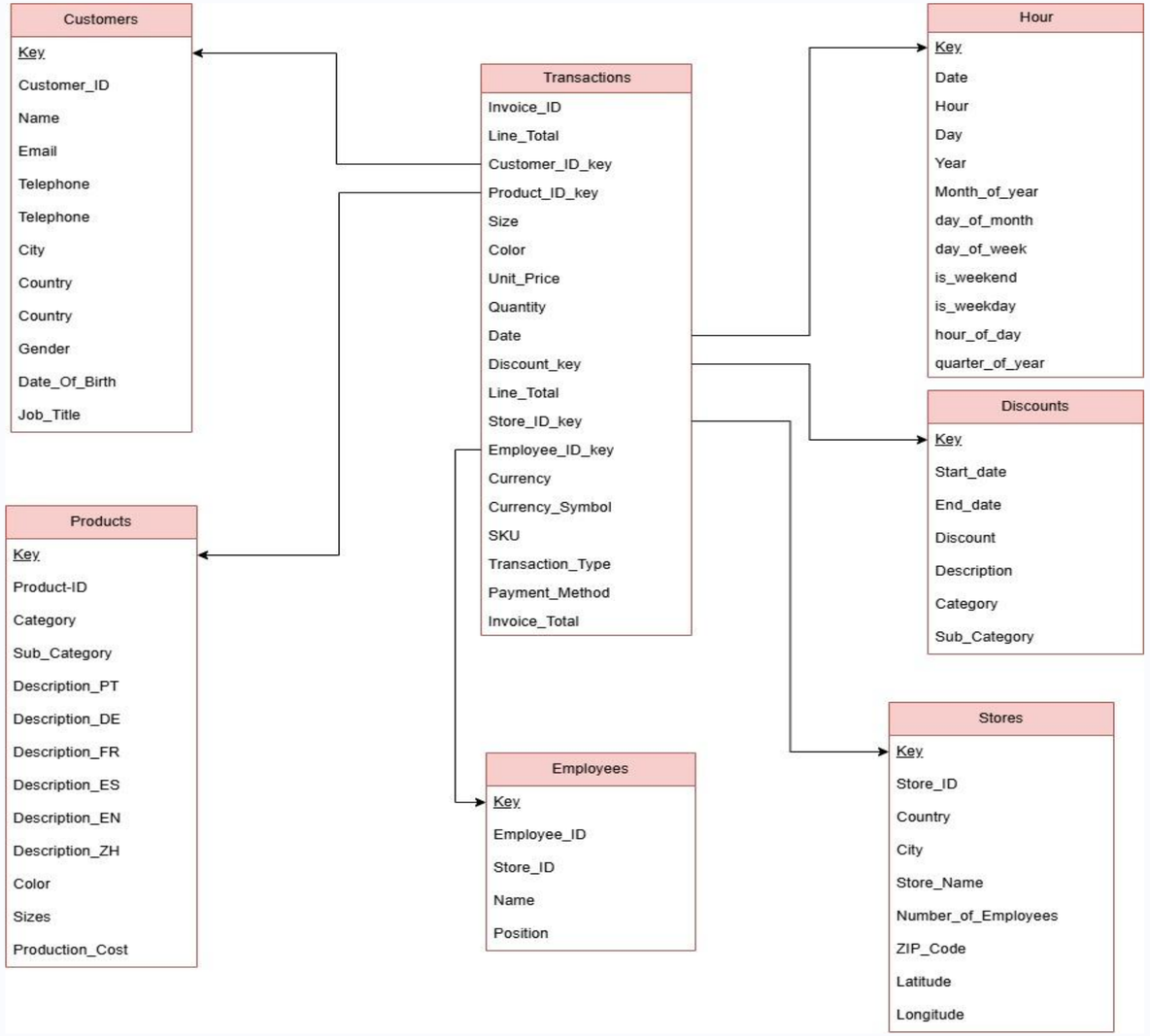
- Designed a fact table using our main file Transactions to store primary metrics and create several dimensional tables for our primary files (e.g customers, stores etc)
- Create hour_key as the primary key for storing date
- Link tables using appropriate primary and foreign keys
- Define each column with the correct data type (e.g., BOOLEAN, VARCHAR, INT) based on its characteristics
- Implemented a star-schema design with fact and dimension tables linked by primary and foreign keys

## Business Questions

1. When do we experience high and low sales periods and how can this guide pricing and promotional timing?
2. Which age ranges are most associated with each product and how can we better target key customer segments?
3. Which stores across countries and cities generate the highest sales and transaction volumes by product category?
4. How do product categories (Feminine, Masculine, Children) perform over time and across countries, and where should resources be reallocated?

# DIMENSIONAL MODELING: CRAFTING OUR DATA ARCHITECTURE

**Our dimensional model provides a clear, efficient structure for analyzing complex retail data, optimizing for performance and ease of querying.**



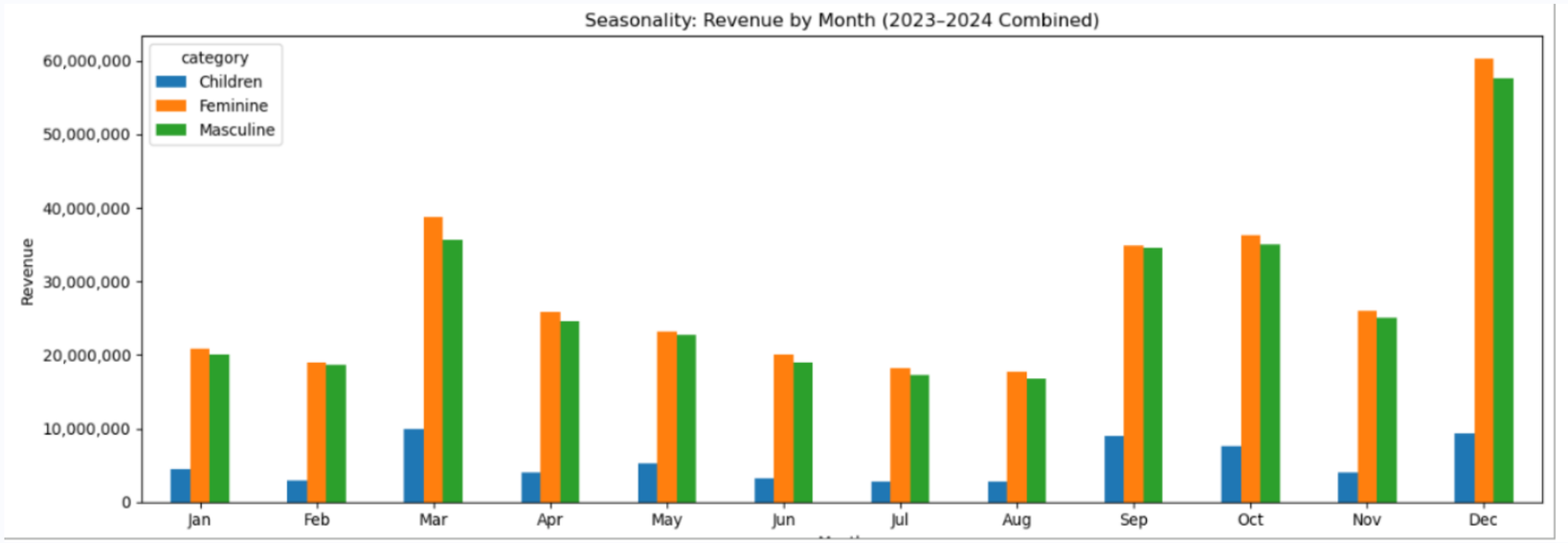

**The model ensures that critical business questions can be answered quickly, supporting agile decision-making and strategic planning.**

# DATA ANALYSIS: OPTIMIZING SALES & PROMOTIONS

**Understanding sales cycles is crucial for effective pricing and promotional strategies. We identify key periods to maximize revenue.**

## Identify High/Low Sales Periods

Sales exhibit strong seasonal patterns, with peaks in March, fall, and December and slowdowns in early and mid-year, indicating that promotions should be targeted during low-demand months to maximize revenue impact.




## Recommendations

Schedule discounts and campaigns during optimal windows for maximum customer engagement.

Maximize Sales Performance

Guide Pricing Strategies

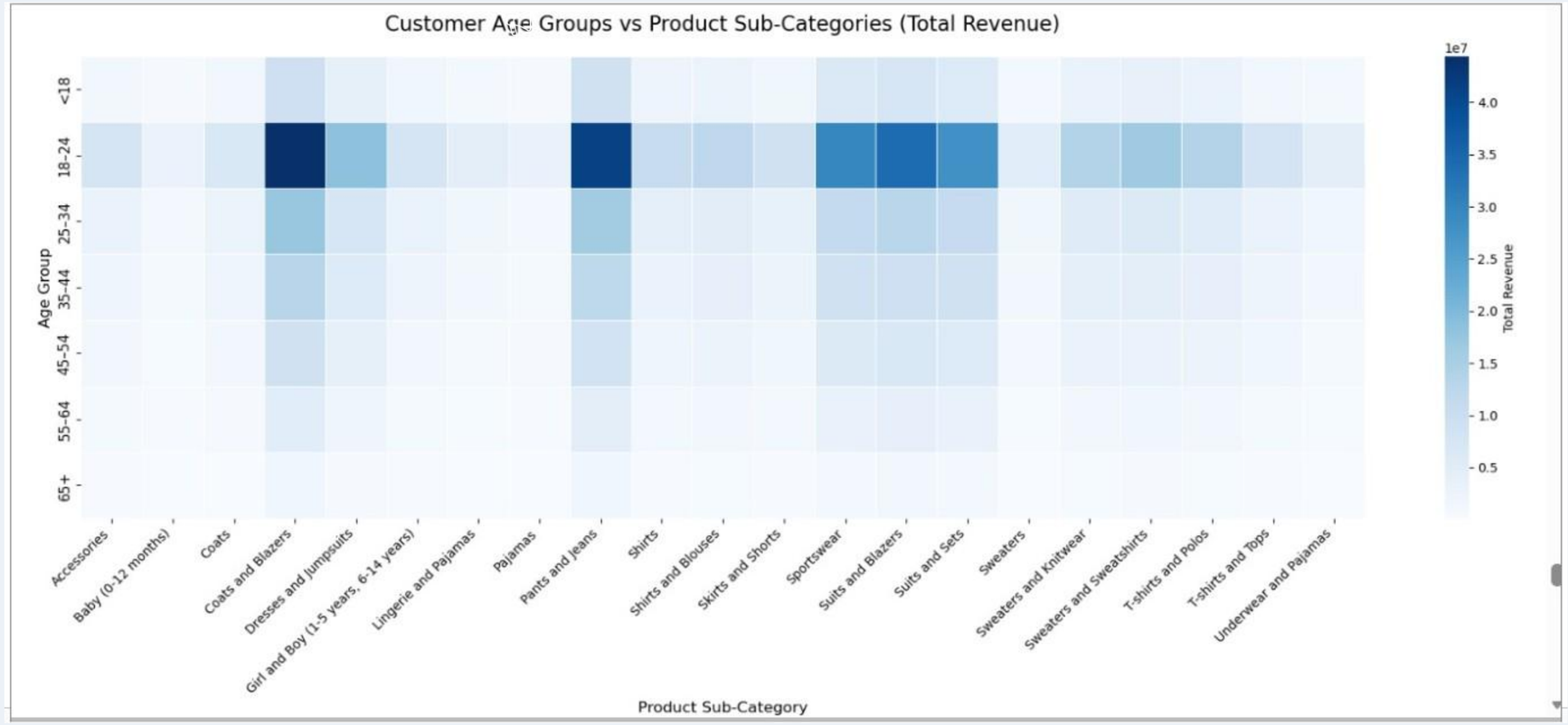
Optimize Promotion Timing

# DATA ANALYSIS

**Identify Key Customer Age Segments Driving Revenue**

## Revenue Concentration by Customer Age Group and Product Type

The analysis shows that younger customers, particularly ages 18–24, drive the majority of fashion revenue, with strong preferences for sportswear and structured apparel, indicating that product, marketing, and inventory strategies should be tailored toward younger market segments




## Recommendations

- Prioritize the 18–24 customer segment.
- Emphasize sportswear and structured apparel.
- Apply age-based targeting in promotions.
-

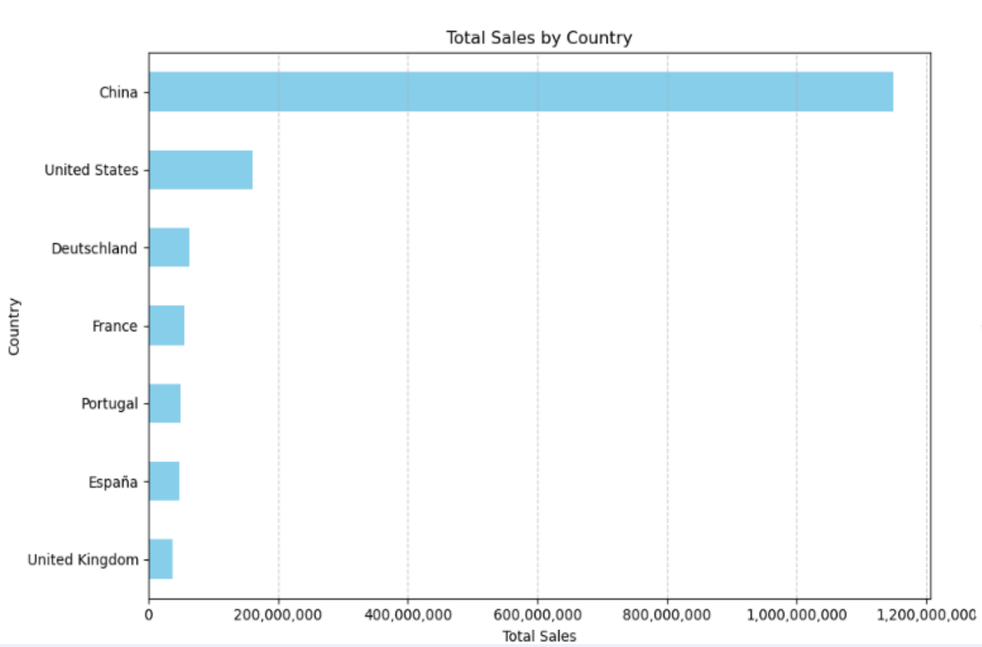
# DATA ANALYSIS

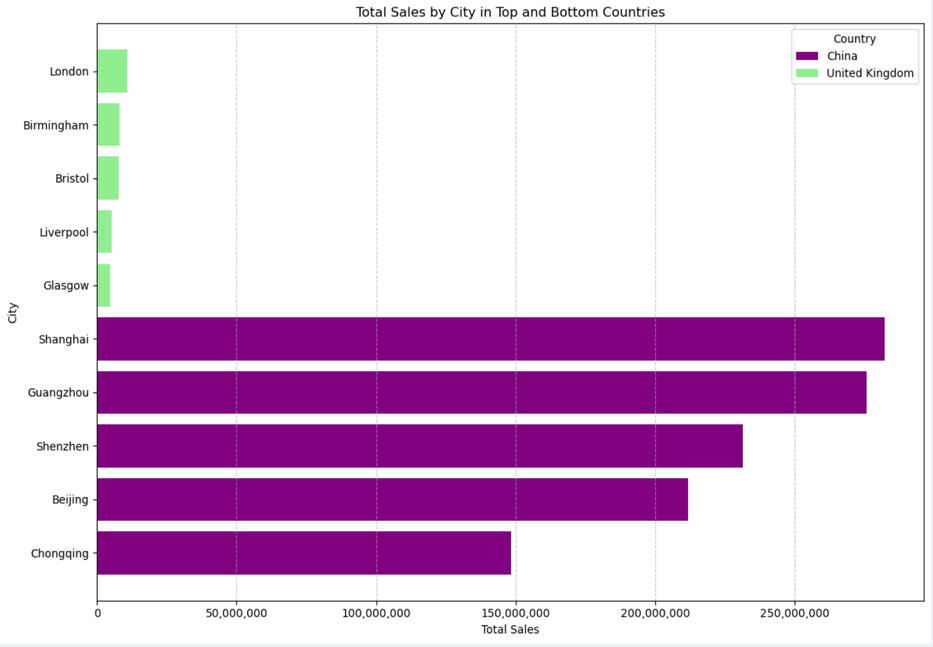
**Identify Top-Performing Stores Across Countries and Cities**

## Store Performance by Country and Cities

Sales performance is heavily concentrated in China, significantly outperforming all other markets. Revenue is driven by a small number of major Chinese cities (e.g., Shanghai, Guangzhou, Beijing).

European markets, particularly the UK, contribute comparatively lower sales at both country and city levels.




## Recommendations

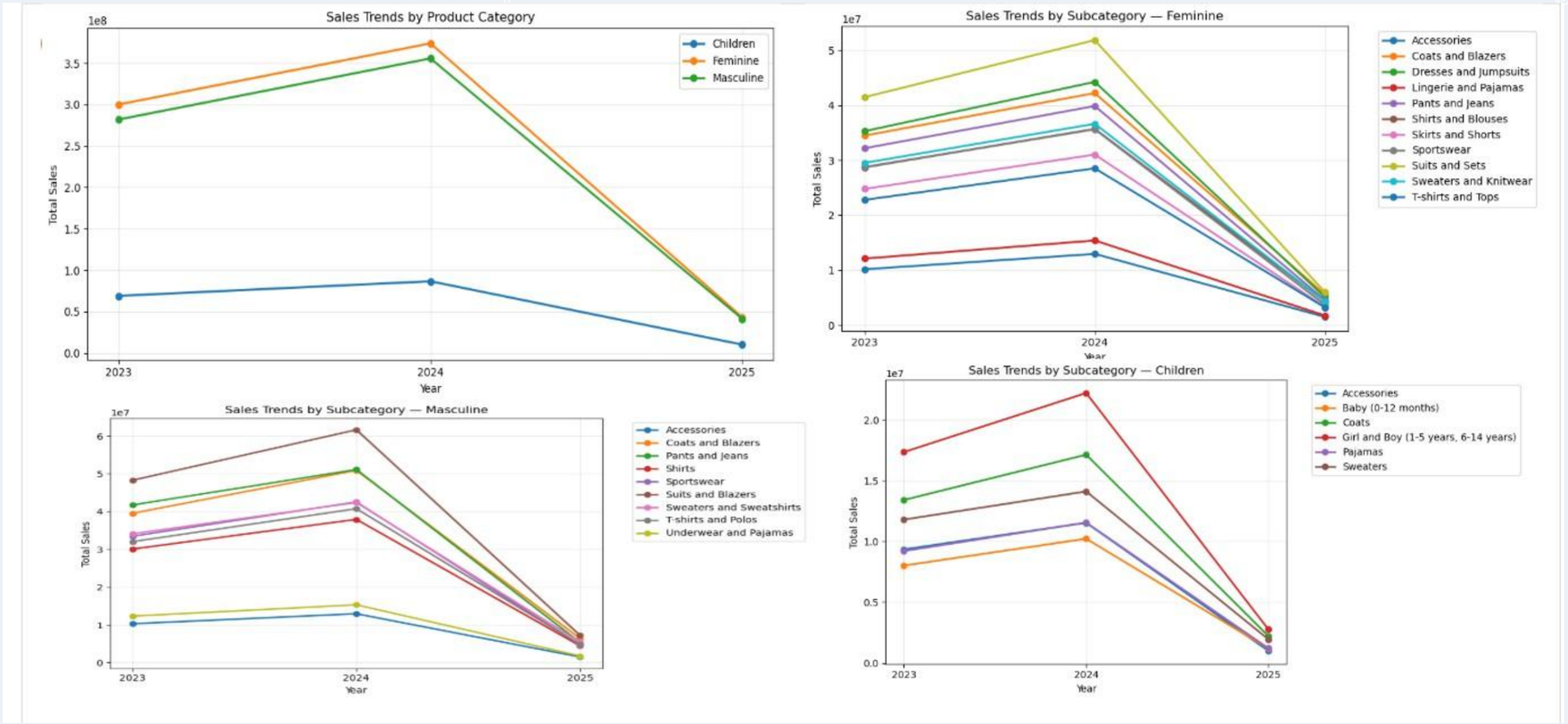
- Focus investment on top-performing Chinese cities
- Scale proven store strategies across markets
- Reevaluate underperforming European locations

# DATA ANALYSIS

**Identify High-Impact Product Subcategories Driving Sales Performance**

## Top Performing Subcategories (Key Drivers)

Feminine and Masculine categories consistently outperform Children, with Sportswear, Shirts, Pants & Jeans and Coats & Blazers emerging as the strongest subcategories. Sales peak in 2024 across all segments, followed by a sharp decline in 2025, likely due to incomplete data rather than reduced demand.




## Recommendations

- Focus on top-performing subcategories
- Allocate resources to Feminine and Masculine lines
- Optimize underperforming Children's segments

# KEY FINDINGS AND CONCLUSION

**Building on our data analysis,these are our key findings and conclusion**

- Sales follow a strong seasonal pattern, with demand peaking in March, Fall and December and slowing during early and mid-year periods.

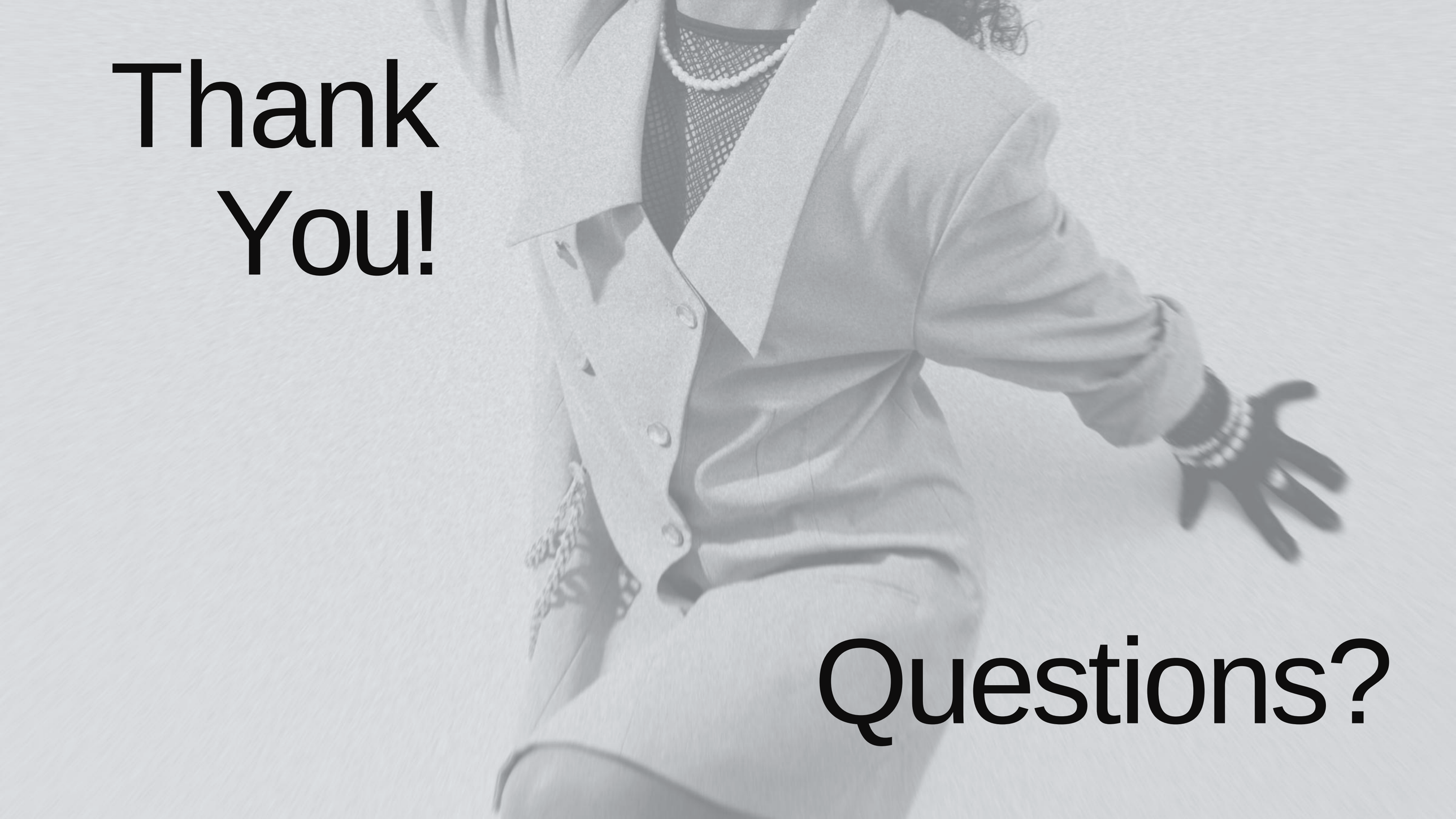
- Customers aged 18–24 are the most valuable segment, generating the highest revenue and showing strong preference for sportswear and structured apparel.

- Revenue is highly concentrated in a few top-performing Chinese cities, while several European markets underperform

- Data-driven insights support smarter decisions in pricing, marketing, inventory allocation and location strategy

**By leveraging insights on seasonality, customer demographics, product performance and geographic concentration, the business can optimize pricing, promotions, inventory, and location strategies to drive sustainable sales growth.**

# Thank You!



# Questions?