



# Visualization of Customer Behavior : Creating Data-Driven business decisions

Final presentation



# Member list

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# Overview

Understanding customer behavior is crucial for businesses looking to optimize their marketing strategies and inventory management.

By analyzing the patterns in which customers of different demographics make purchases, companies can tailor their approaches to better meet customer needs and predict future trends.

The visualization we are going to create addresses this challenge by analyzing different customer purchasing data such as age, gender, category, season, and payment and shipping method.

# Our Dataset

https://www.kaggle.com/datasets/iamsouravbanerjee/customer-shopping-trends-dataset +

## Customer Shopping Trends Dataset

Journey into Consumer Insights and Retail Evolution with Synthetic Data



Data Card    Code (88)    Discussion (6)

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### About Dataset

#### Context

The Customer Shopping Preferences Dataset offers valuable insights into consumer behavior and purchasing patterns. Understanding customer preferences and trends is critical for businesses to tailor their products, marketing strategies, and overall customer experience. This

#### Usability

10.00

#### License

Other (specified in description)





# Our Dataset

Our visualization dataset contains **3900 customer purchase profiles**. Each customer has 7 related attributes, including **Age, Gender, Category, Payment Method, Shipping Type, Item Purchased, and Season**.

Using these attributes, we can derive the age distribution of purchases by gender, the purchase proportion of each category, the relationship between different payment methods and shipping types, and the purchase trend of each item over the seasons.





## Usage scenarios & tasks

A clothing retailer aims to gain insights into the characteristics of its customer base, such as the types of clothing purchased and differences in shopping habits across various age groups.

Through our interface, he can accomplish the following:

### 1. Demographic Analysis:

Observe the number of consumers in different age groups and analyze the gender distribution.

### 2. Purchase Type Analysis:

Examine the proportion of clothing types purchased, and explore details within each clothing category, such as shirts, dresses, sweaters, etc.





# Usage scenarios & tasks

## 3. Payment and Shipping Preferences:

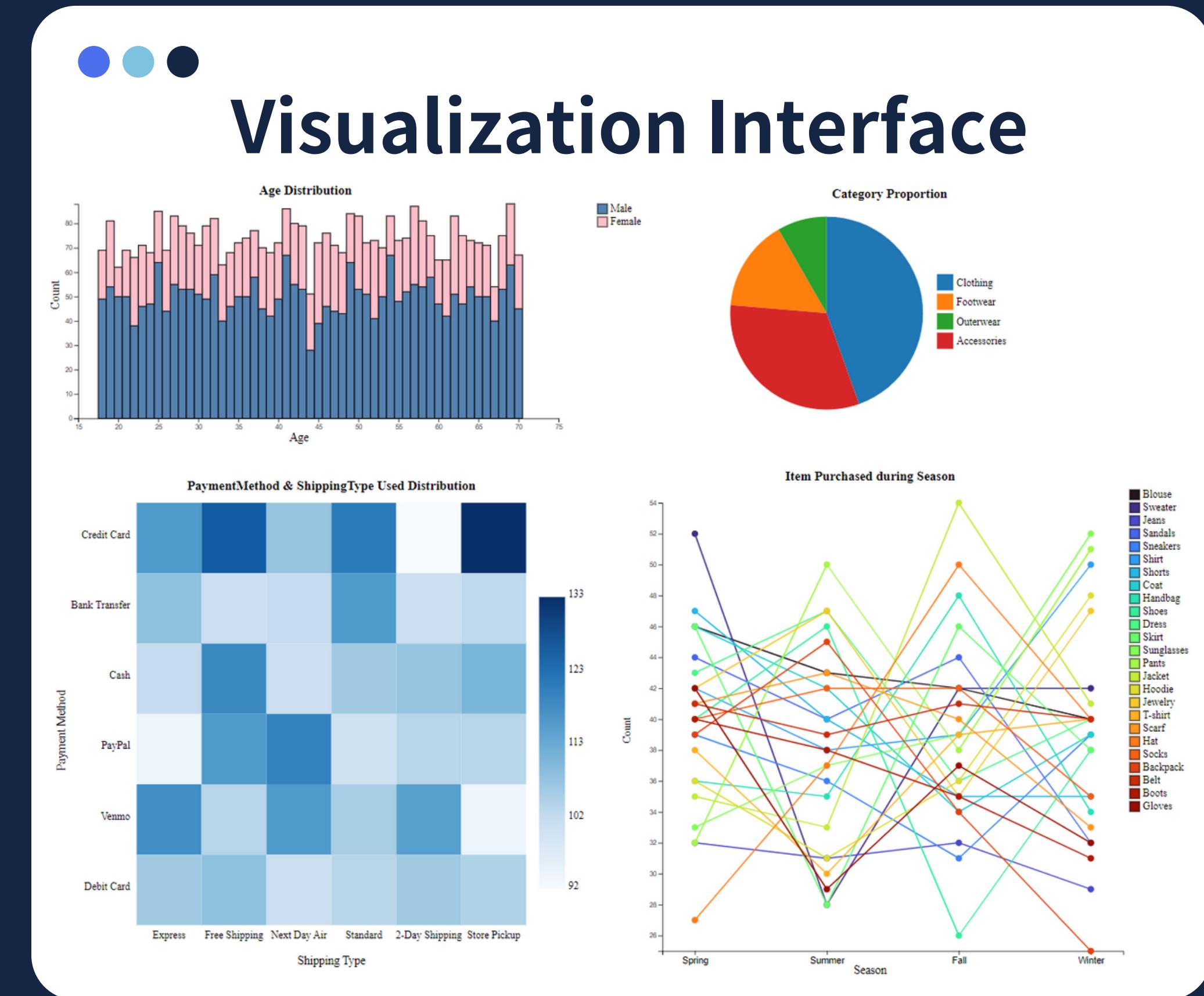
Gain insights into consumers' preferred payment and shipping method combinations.

## 4. Seasonal Purchase Patterns:

Evaluate consumer preferences for clothing types during different seasons, and identify which product categories experience higher sales during specific seasons.

This information can assist the retailer in tailoring their inventory, marketing strategies, and overall business approach to better meet the needs and preferences of their diverse customer base.

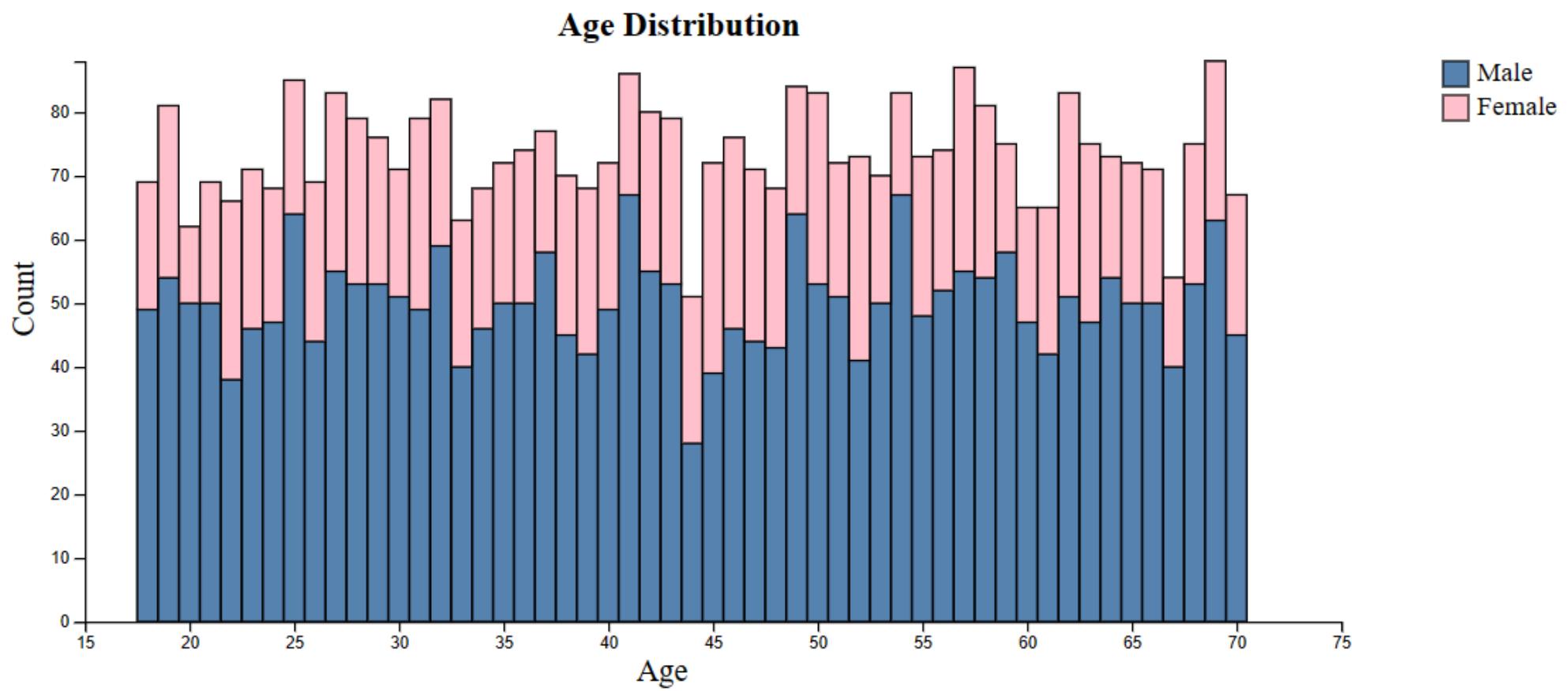






# Visualization Interface

A stacked histogram about the customers age distribution.

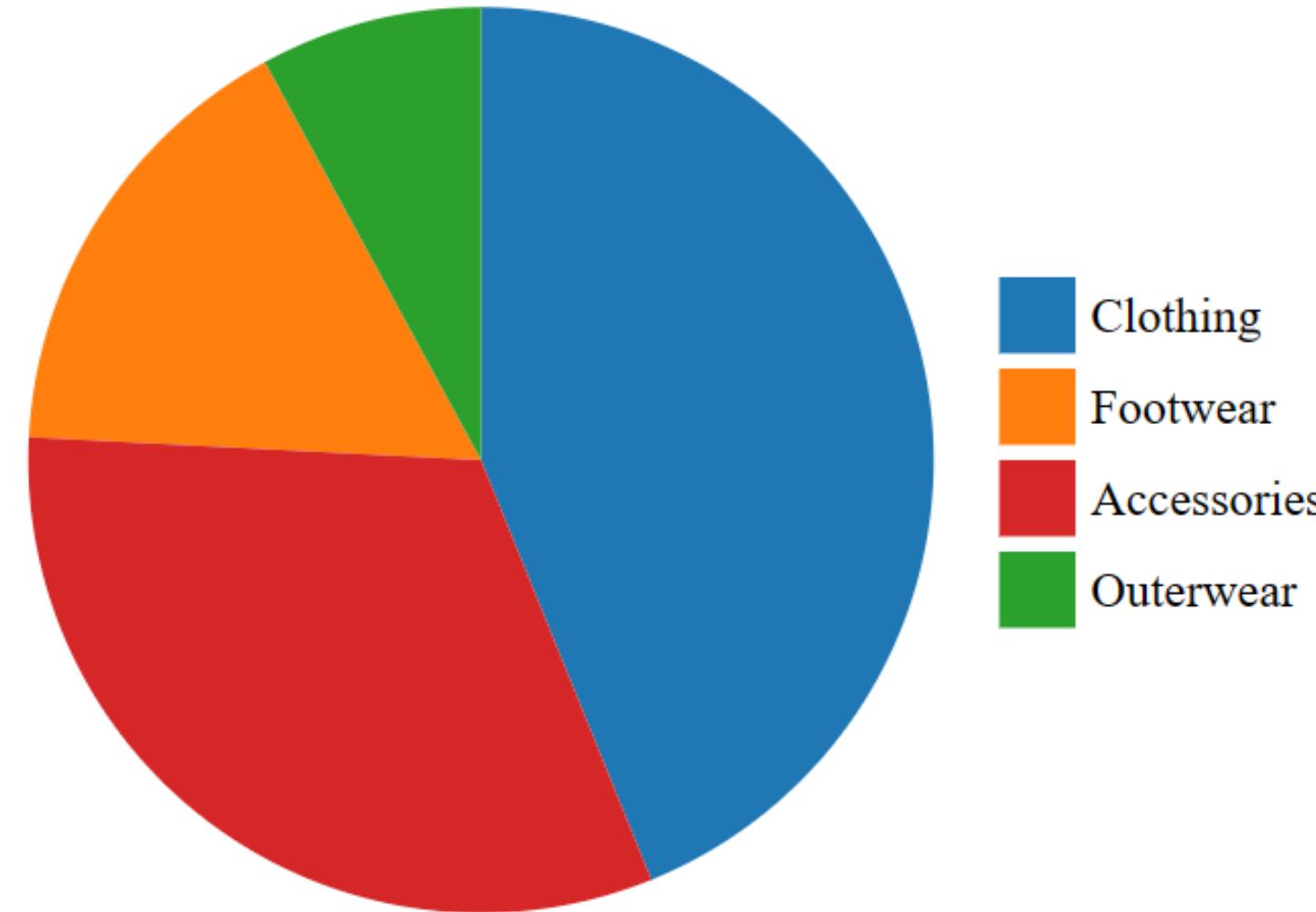




# Visualization Interface

A pie chart of the purchase category proportion.

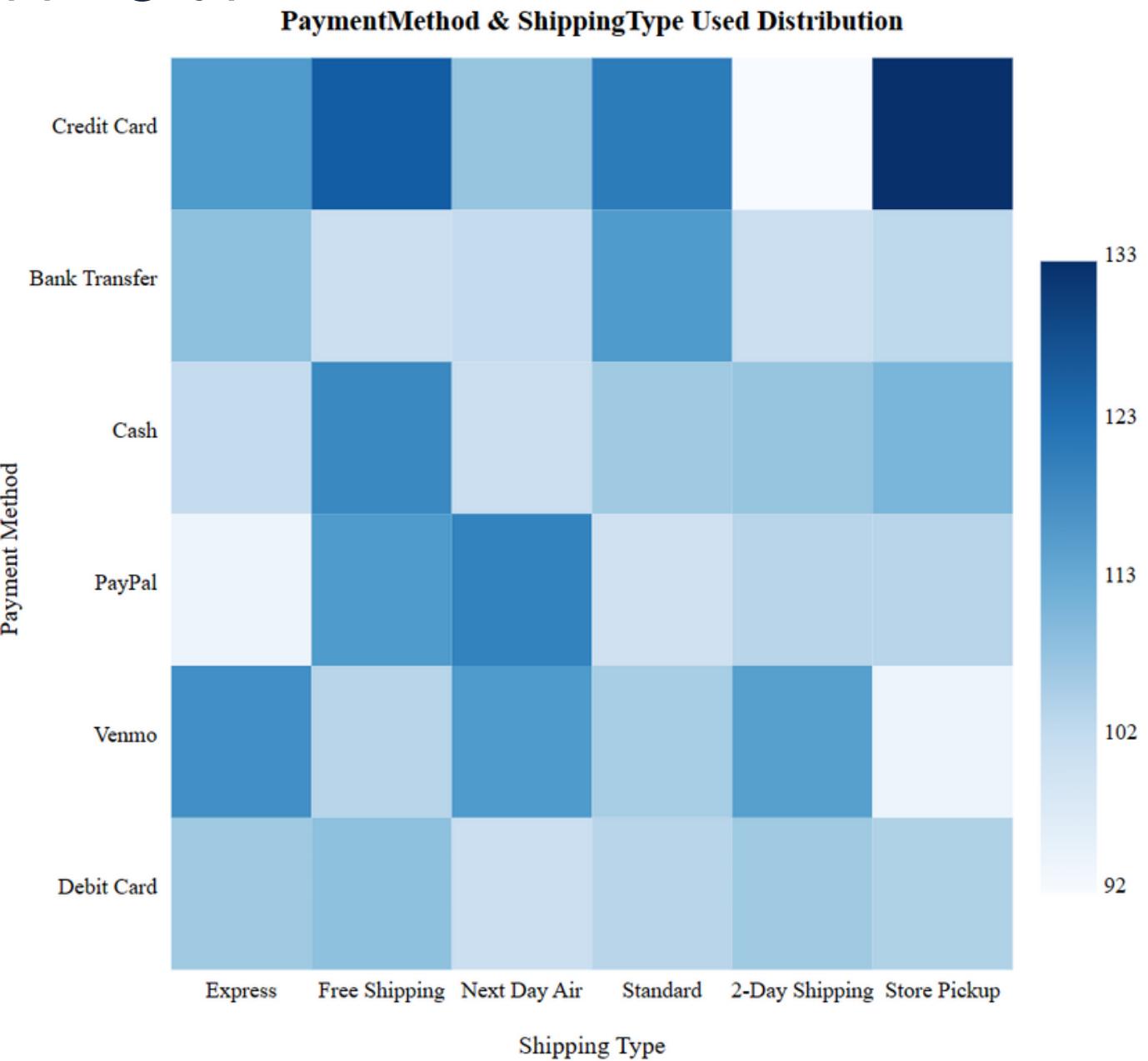
**Category Proportion**





# Visualization Interface

A heat map to find out the most used payment method and shipping type.





# Visualization Interface

A line chart to find out the best seller during seasons.

