# Shopping Mall Trends in Istanbul

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# Agenda

1.  Context

2.  Data Description

3.  Data Analysis and Visualization

4.  Conclusion

# 1. Context

# Context

- Data from 10 shopping malls in Istanbul, Turkey
- Includes data from 2021 to 2023(March)
- Total of 12 variables

Segmentation

Trend Analysis

# Questions

1. What types of customers do each mall have?

2. Which are the peak shopping seasons versus lower spending seasons?

3. What is the most popular payment method used in each mall and by which customers?

4. Who is spending more on which categories among Females and Males?

5. What are the most popular categories among different age groups?

# 2. Data Description

# Variables

## Non-numeric Variables

**Customer ID**
- Unique

**Invoice Number**
- Unique

**Gender**

**Mall Name**

**Payment Method**

**Category**
- Item category

**Invoice Date**

**Weekday**

## Numeric Variables

**Quantity**
- Items per transaction

**Price**
- Unit price in Turkish Liras

**Total**
- Sale total in Turkish Liras

**Age**

**1 USD = 19.40 Turkish Liras**

# The Dataset

3 different payment methods

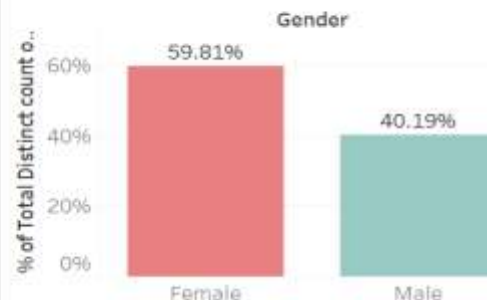Average of 3 items per transaction

8 different product categories

Average transaction value of ₺2,529
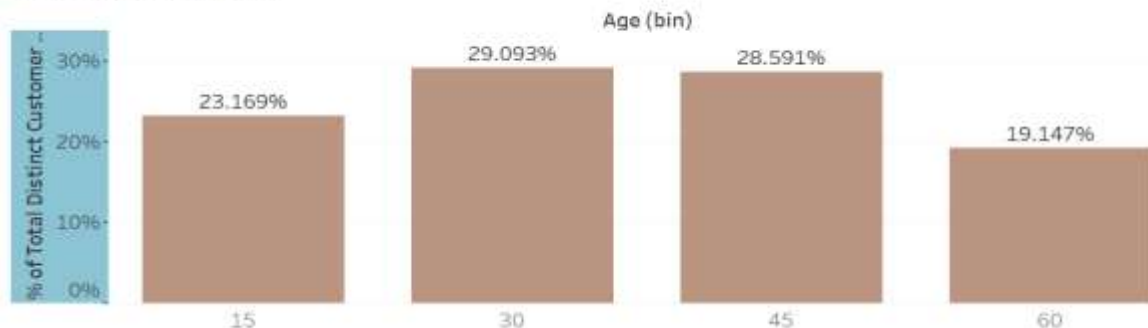
Total Sale Value = Quantity*Price

# Data Description

# 3. Data Analysis and Visualization

# Data Analysis



Total sales Map

Istinye Park
₺24,618,827.68

Mall of Istanbul
₺50,872,481.68

Forum Istanbul
₺12,303,921.24

Kanyon
₺50,554,231.10

Shopping Mall: **Metrocity**
Total: ₺37,302,787.33

Emaar Square Mall
₺12,406,100.29

Metropol AVM
₺25,379,913.19
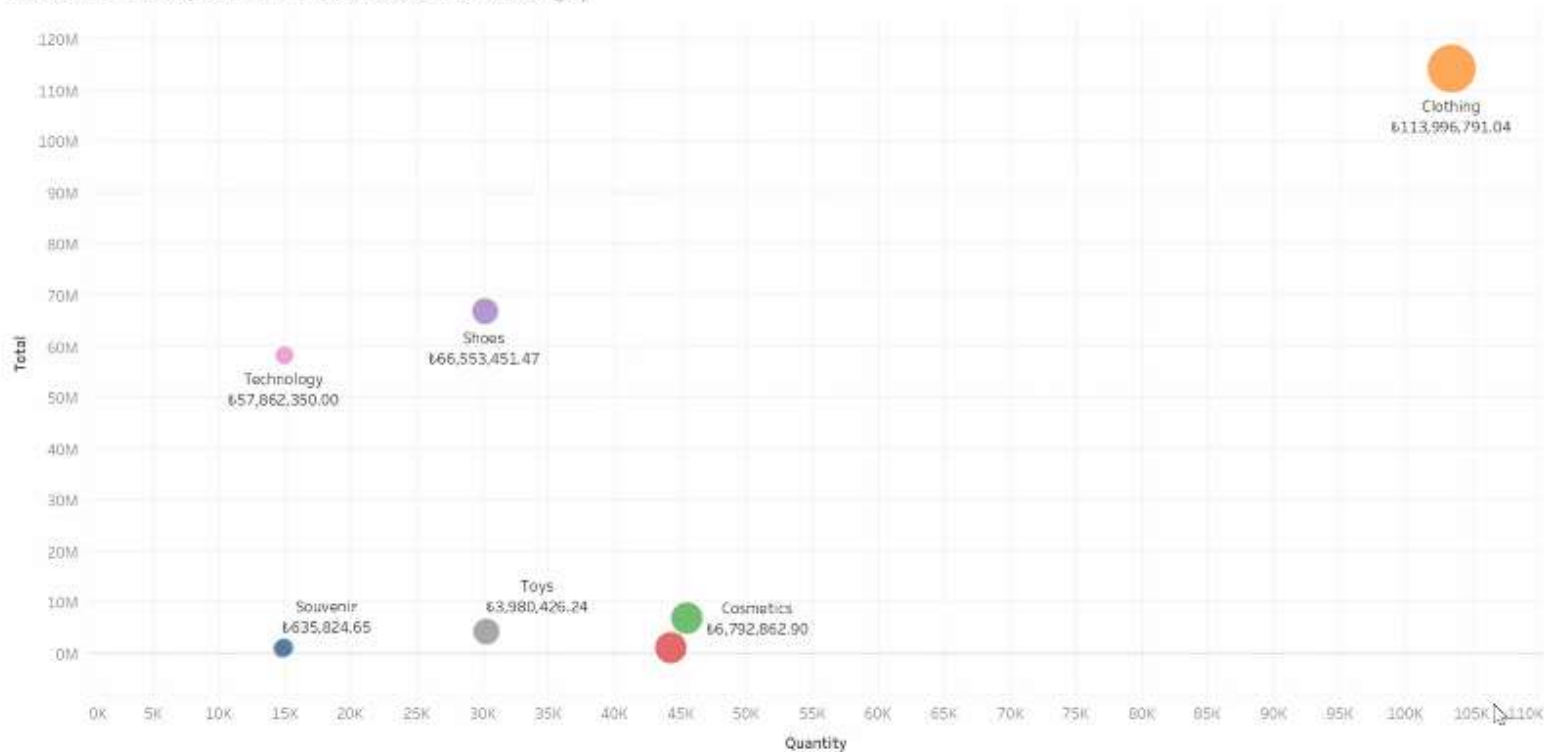
Viaport Outlet
₺12,521,339.72

© 2023 Mapbox © OpenStreetMap
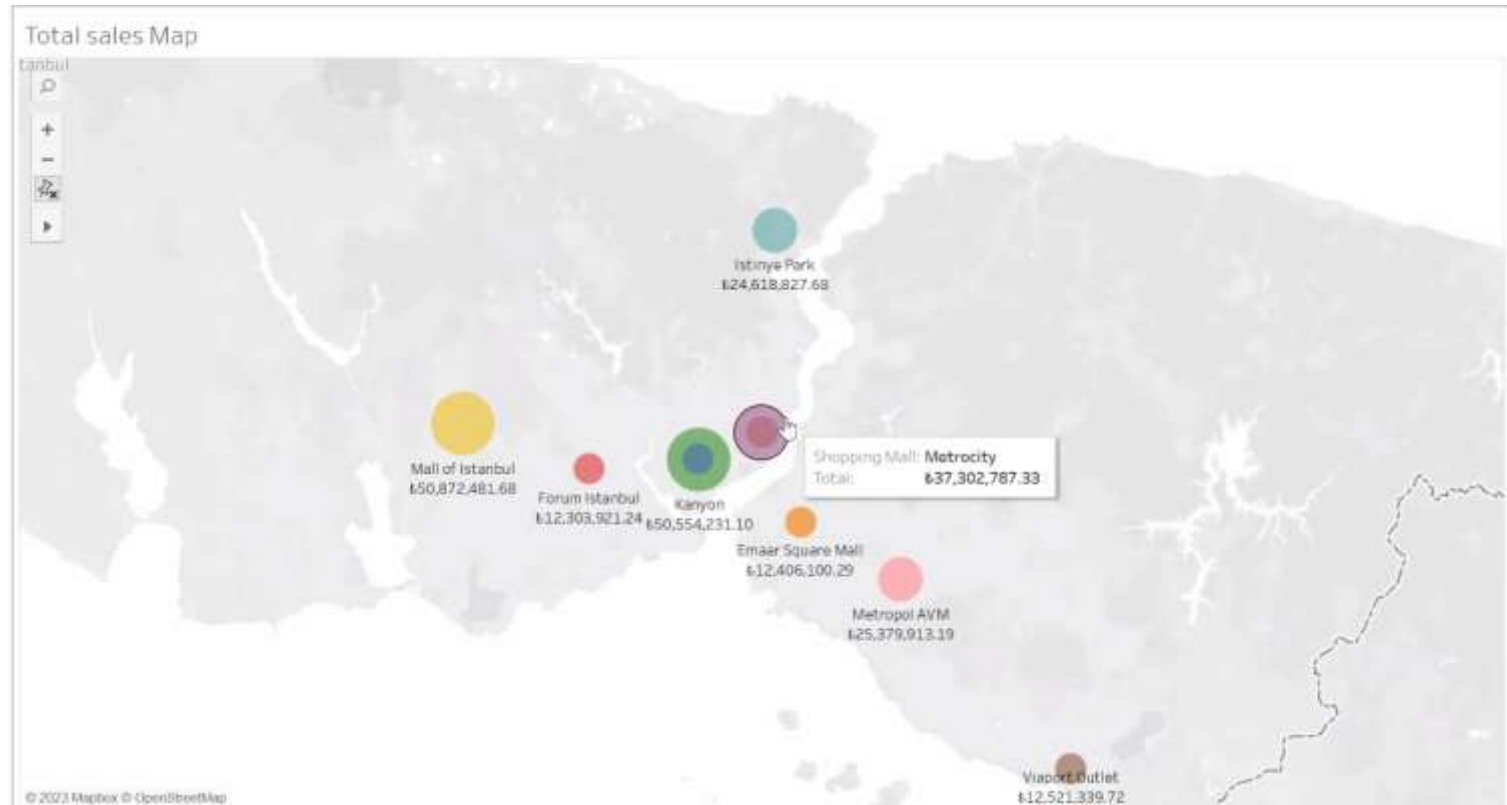
# Data Analysis

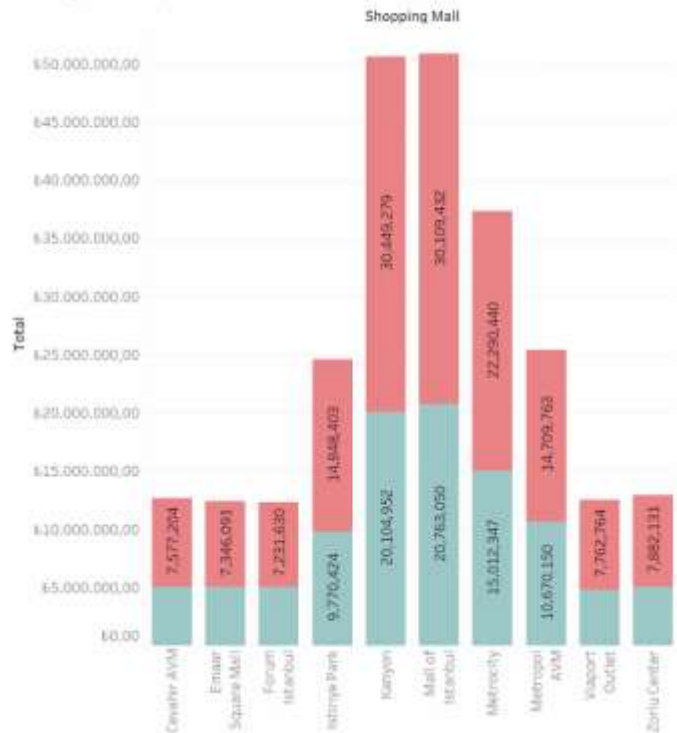Sales (TL) vs. Sales (Quantity)
The size of the bubble represents the number of transactions in each category

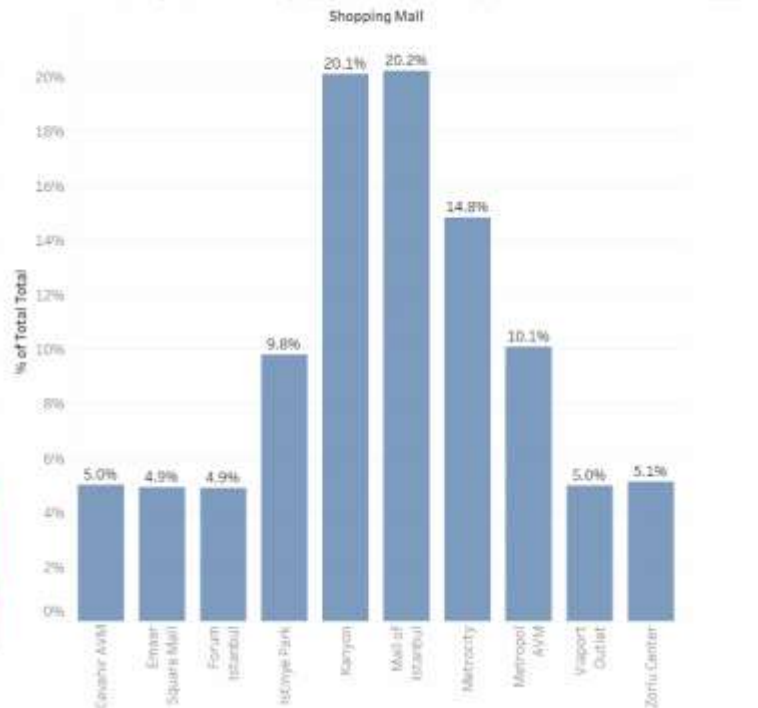# Q1. What types of customers does each mall have?

# Data Analysis



**Sales by gender per Mall**
on average Females spent more than male

Shopping Mall

**Percent of Total Sales by Mall**
Mall of Istanbul, Kanyon, and Metrocity appear to be the 3 most popular malls

Shopping Mall

Gender
■ Female
■ Male

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# Data Analysis



Mallwise - Customers by Age Group

# Q2. What are the peak shopping seasons?

# Data Analysis

pping by month
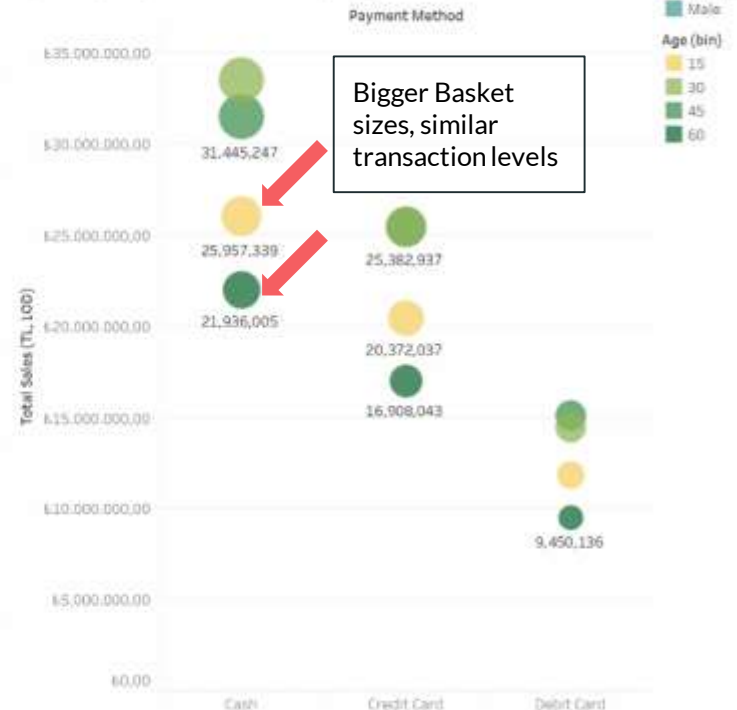
# Q3. Most popular payment method by mall and customers?
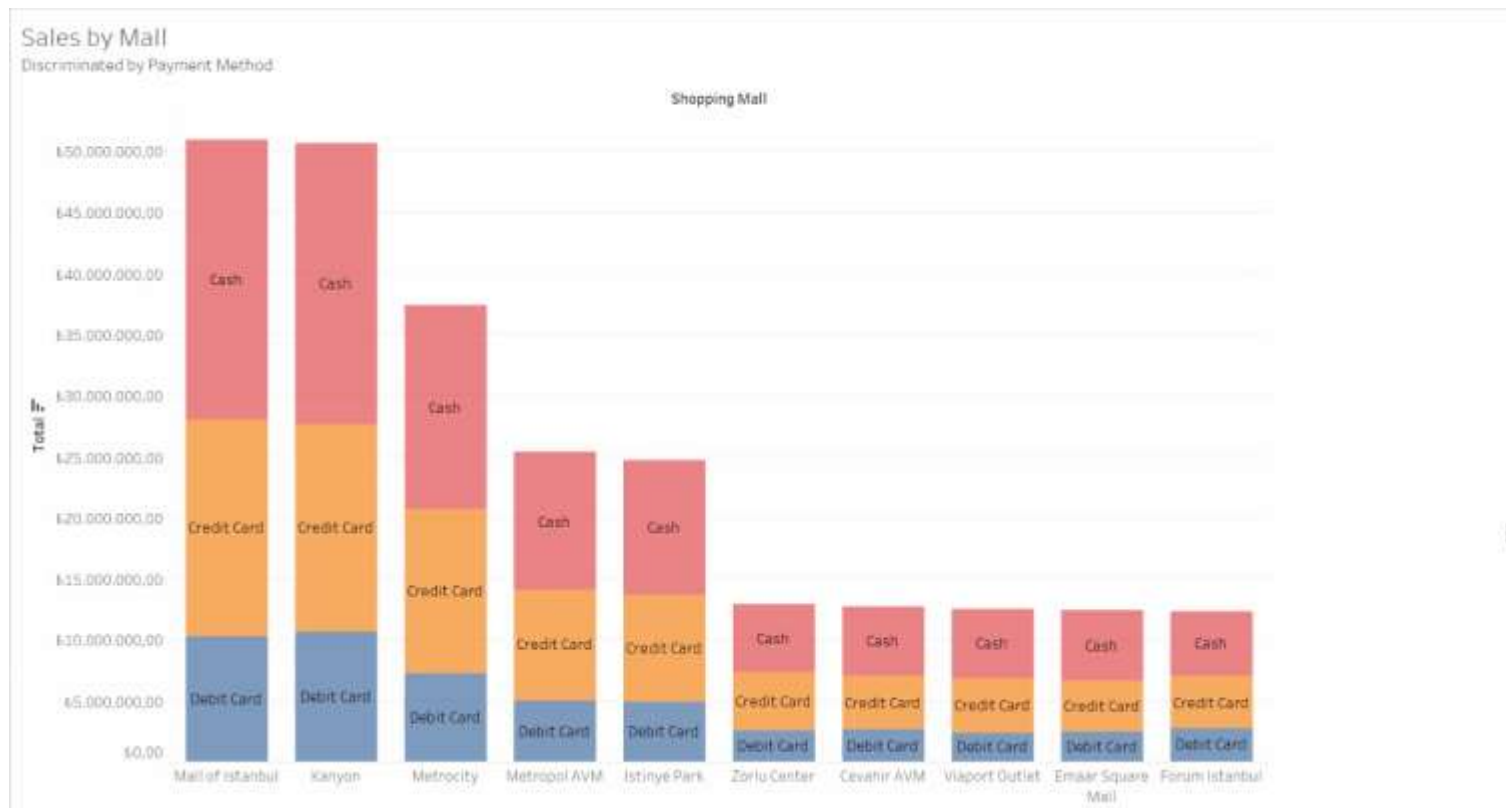
# Data Analysis



Payment Method by Gender
Size of the bubble represents the number of transactions

Spent by Payment Method by Age Group

Gender
- Female
- Male

Age (bin)
- 15
- 30
- 45
- 60

Bigger Basket sizes, similar transaction levels

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# Data Analysis
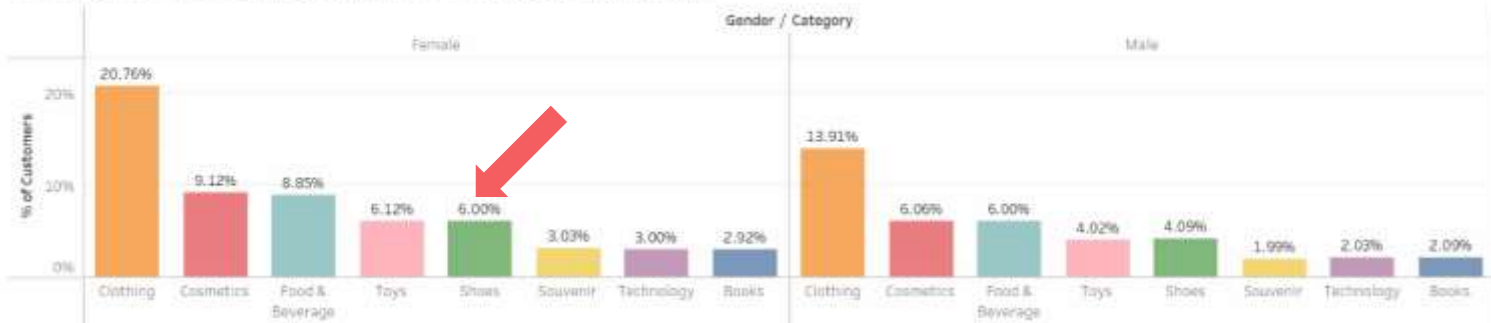


Sales by Mall
Discriminated by Payment Method

# Q4. Who is spending more, on which categories, between males and females?
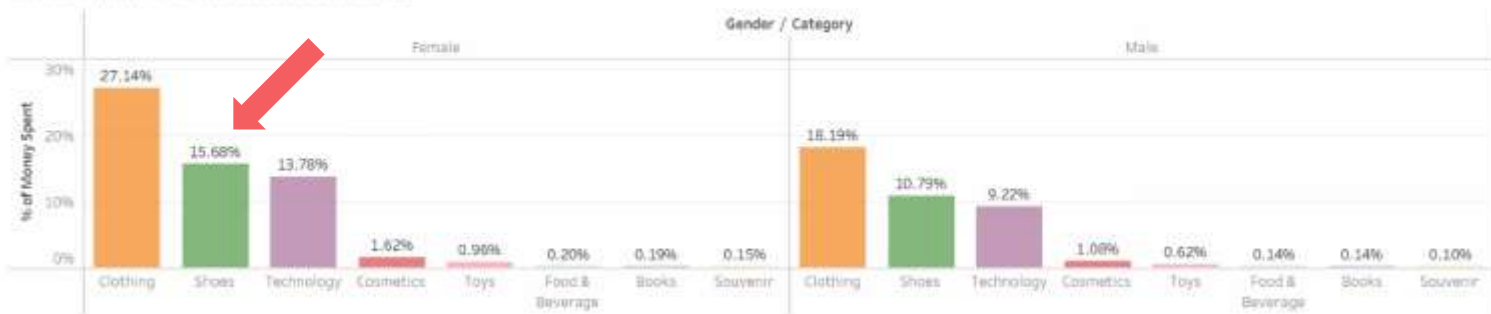
# Data Analysis



Categories preferred

The top three preferences are Clothing, Cosmetics, and Food and beverages for both the genders

Money Spent by Category

More money is spent on clothes, shoes, and technology

# Q5. Which are the most popular categories by age group?

# Data Analysis



Percentage of Transactions by Age & Category
Clothing, Cosmetics, F&B have the highest transactions

Percentage of Total Sales by Age & Category
Clothing, Shoes, Technology have the highest transactions

# 4. Conclusion

# Conclusion

Clothing the most popular and high-revenue category across Istanbul consumers of all segments

Shoes and technology are the most profitable categories in all segments. Yielding the highest sales with lower number of transactions

# Conclusion

Overall women spend more than men, and cash is the most popular method for this gender group

Cash is the most popular payment method in all malls, while debit card is the least popular and yields the least sales

# Recommendations

Clothing, shoes and technology are the categories that yield more revenue, but at the same time can be the most competitive

Women spend more than men, however this later segment can be underserved by the current offerings. A store may have potential to grow this market with targeted offering

On average, young adults (18-34) are spending more than older adults (60+). They can be an easy to target market with innovative offerings in the mall

We recommend any new store to keep accepting cash as a payment method, as we don't yet see a strong cashless culture in Istanbul's Malls

The Mall of Istanbul, Kanyon, and Metrocity are the highest traffic malls. Stores can reach a wider number of segments in them.

# Thank you!