



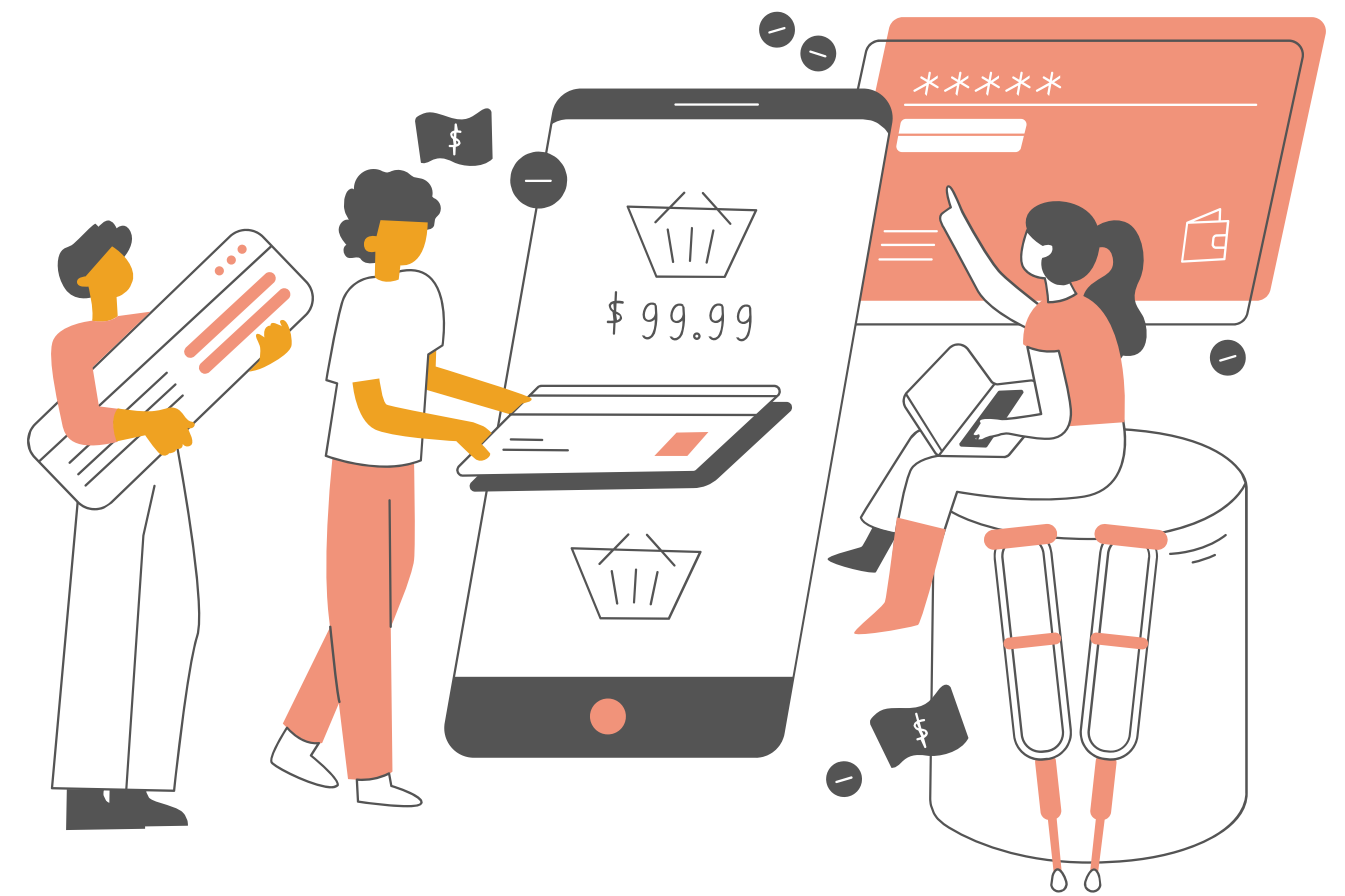
# Customer Segmentation Analysis



Submitted By- Aaspruha Dash  
Akash Narendra Wahane  
Ayush Munjewar  
Chinmay Bonde

# Project Description

The project helps in understanding the shopping habits of customers in Istanbul between 2021 and 2023. Using this data, organizations can understand gender-specific and age-specific choices, revenue generated, and their relationships with other information.



# Approach

For this project, we have used SQL and Power Bi for data cleaning.

The tool Power Bi is used to transform, analyze, and visualize data.

We have also used Canva to make this presentation.

```
1 use project_customer_segmentation;
2 select * from customer;
```

	invoice_no	customer_id	gender	age	category	quantity	price	payment_method	invoice_date	shopping_mall
▶	I100008	C199951	Male	65	Clothing	5	1500.40	Cash	10-07-2022	Emaar Square Mall
	I100014	C138893	Male	55	Cosmetics	5	203.30	Cash	18-06-2021	Viaport Outlet
	I100015	C132779	Female	35	Clothing	2	600.16	Debit Card	04-03-2021	Mall of Istanbul
	I100024	C244411	Female	67	Books	3	45.45	Credit Card	05-01-2023	Emaar Square Mall
	I100027	C150002	Female	19	Technology	4	4200.00	Cash	18-05-2022	Mall of Istanbul
	I100028	C325553	Female	18	Clothing	1	300.08	Credit Card	19-06-2021	Metrocity
	I100031	C378408	Male	18	Food & Beverage	3	15.69	Credit Card	23-06-2022	Emaar Square Mall
	I100033	C278721	Male	56	Food & Beverage	4	20.92	Credit Card	19-10-2021	Zorlu Center

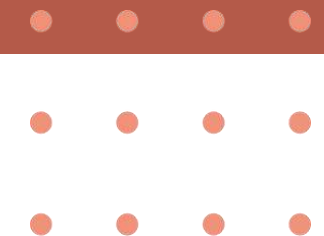


# INSIGHTS

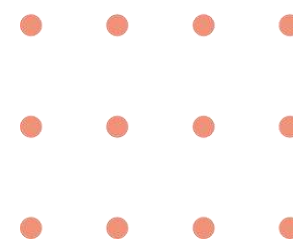


## Shopping Distribution

By analyzing the data, we found that most purchases were made in the mall of Istanbul, and females bought more products compared to males.

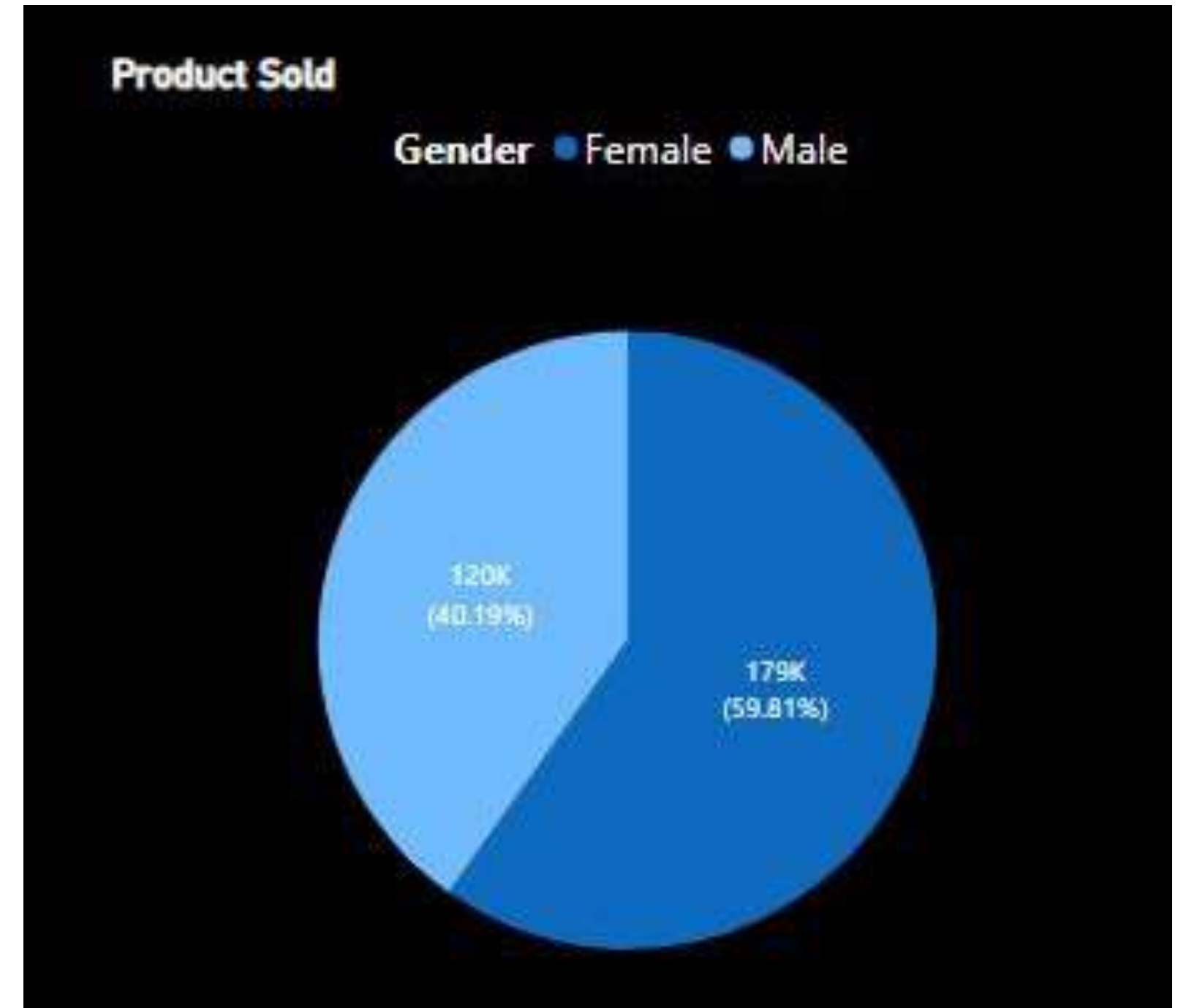


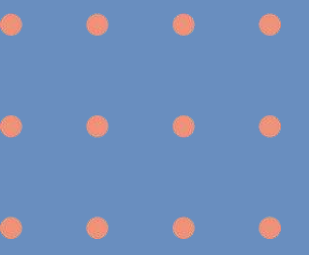




# Product Sales

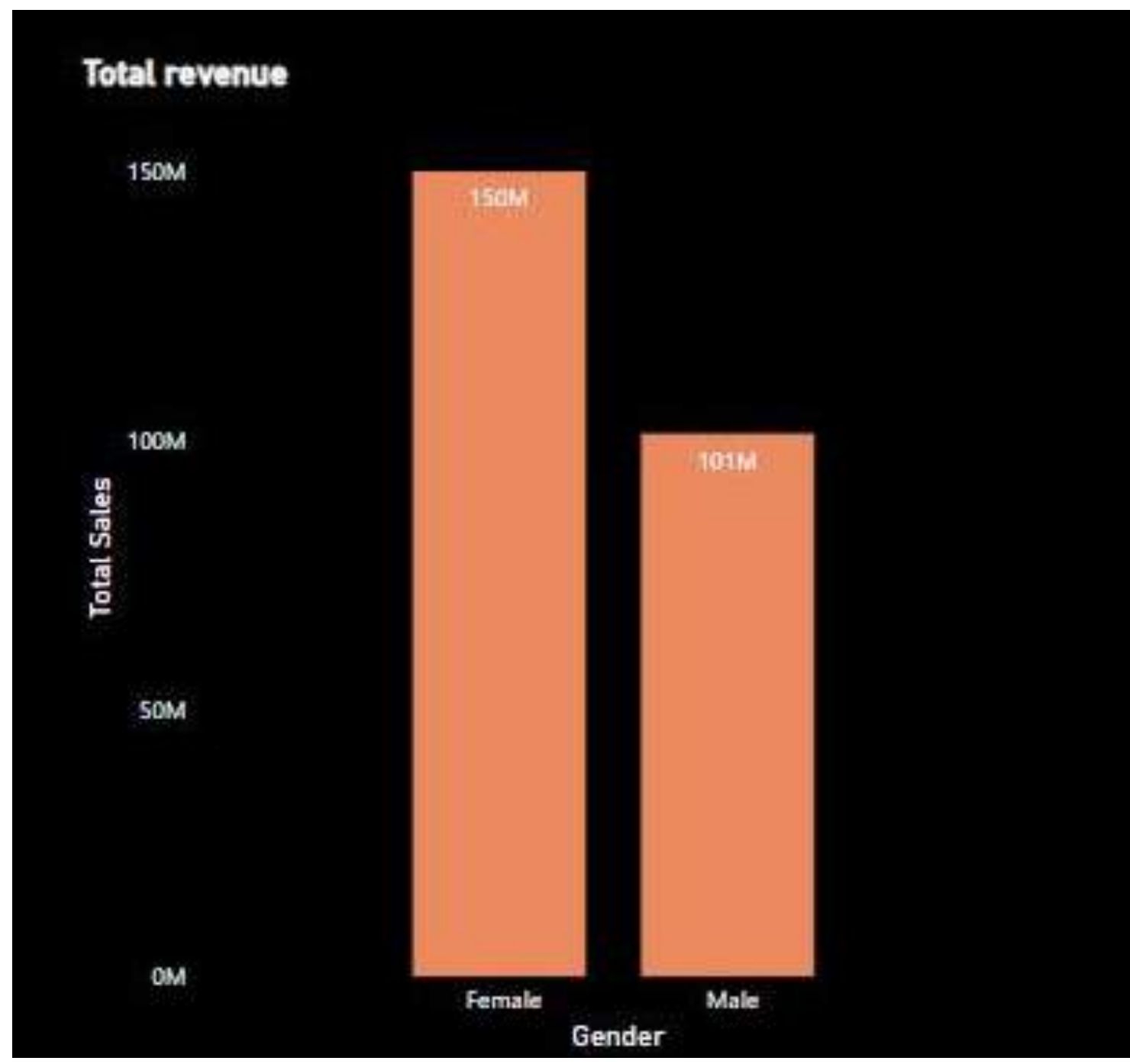
Female customers bought more products than males. The product sold to females is around 179k, and for male buyers, it reached 120k.





# Revenue Earned (2021-2023)

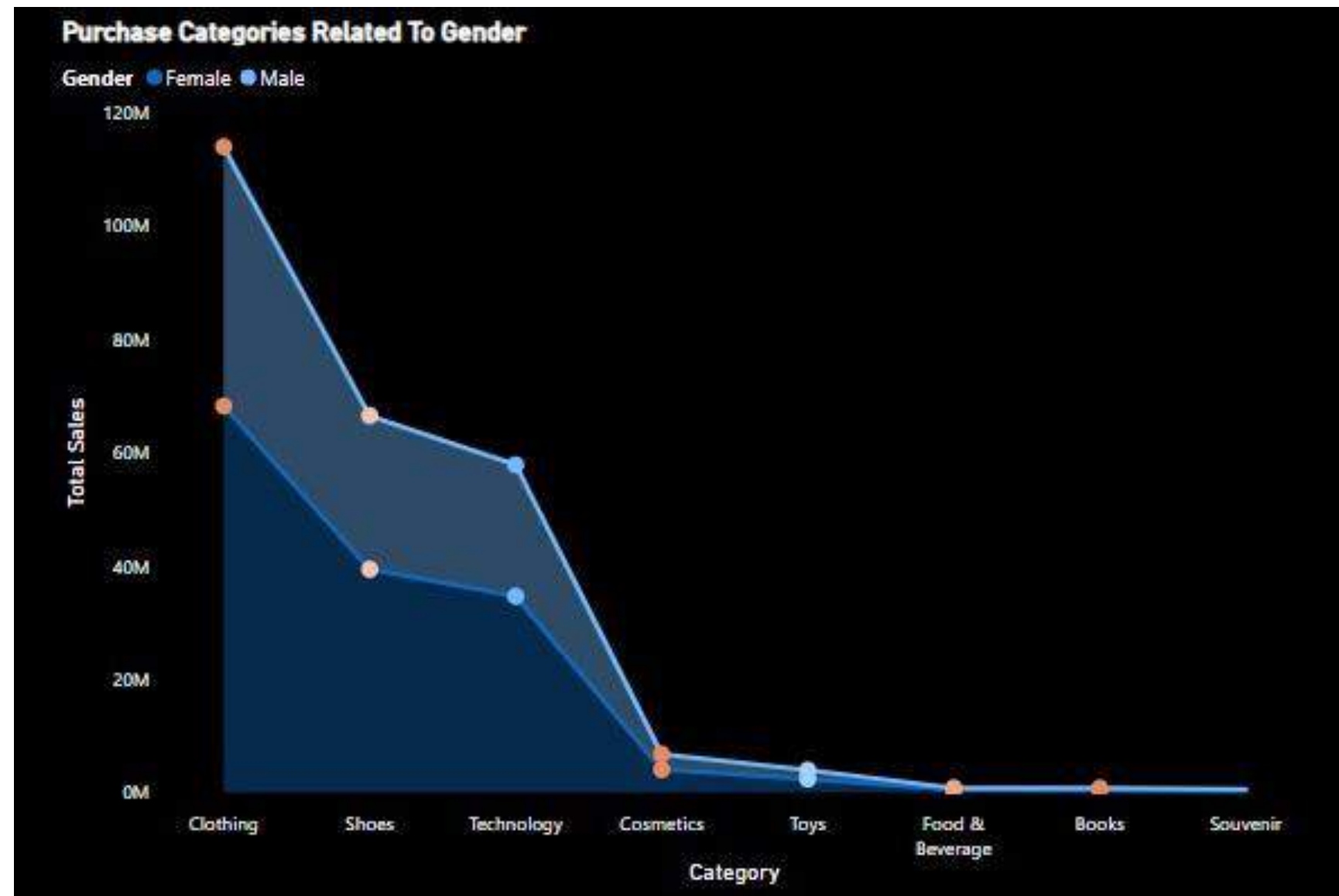
As per the data, a total of 150 million was generated from female buyers, whereas 101 million was generated from male customers.





# Purchase Category Distribution

Most products were purchased in the clothing category, and the least profitable product was souvenir.



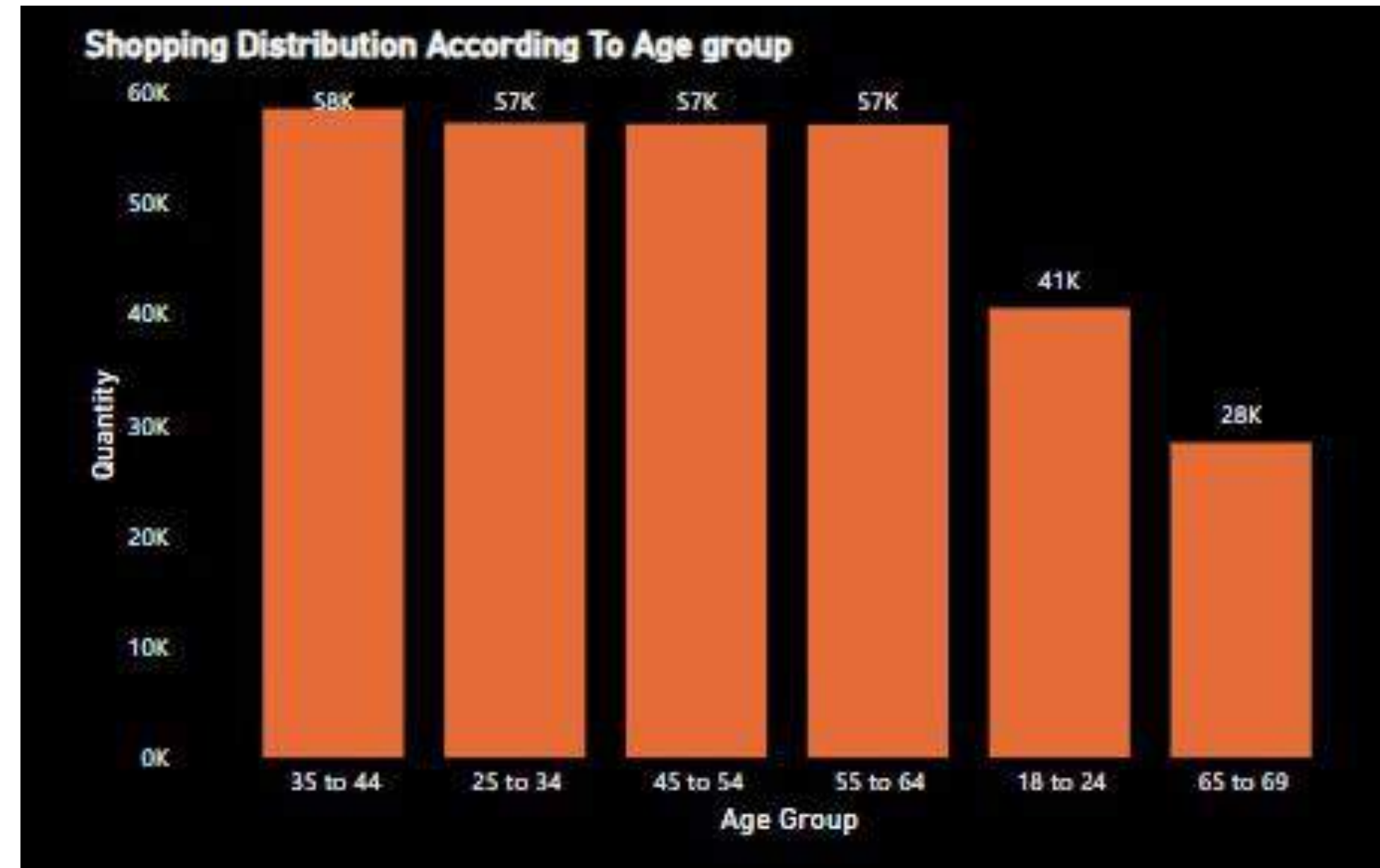
category	gender	purchase_count
Books	Female	2906
Books	Male	2075
Clothing	Female	20652
Clothing	Male	13835
Cosmetics	Female	9070
Cosmetics	Male	6027
Food & Beverage	Female	8804
Food & Beverage	Male	5972
Shoes	Female	5967
Shoes	Male	4067
Souvenir	Female	3017
Souvenir	Male	1982
Technology	Female	2981
Technology	Male	2015
Toys	Female	6085
Toys	Male	4002

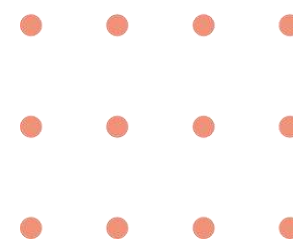




# Age-Based Shopping Distribution

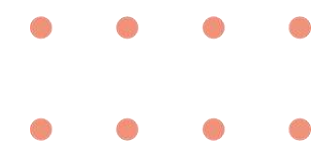
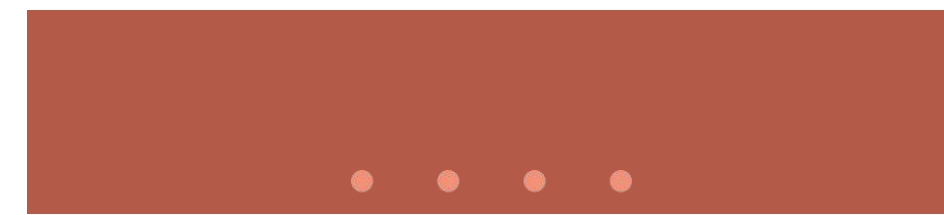
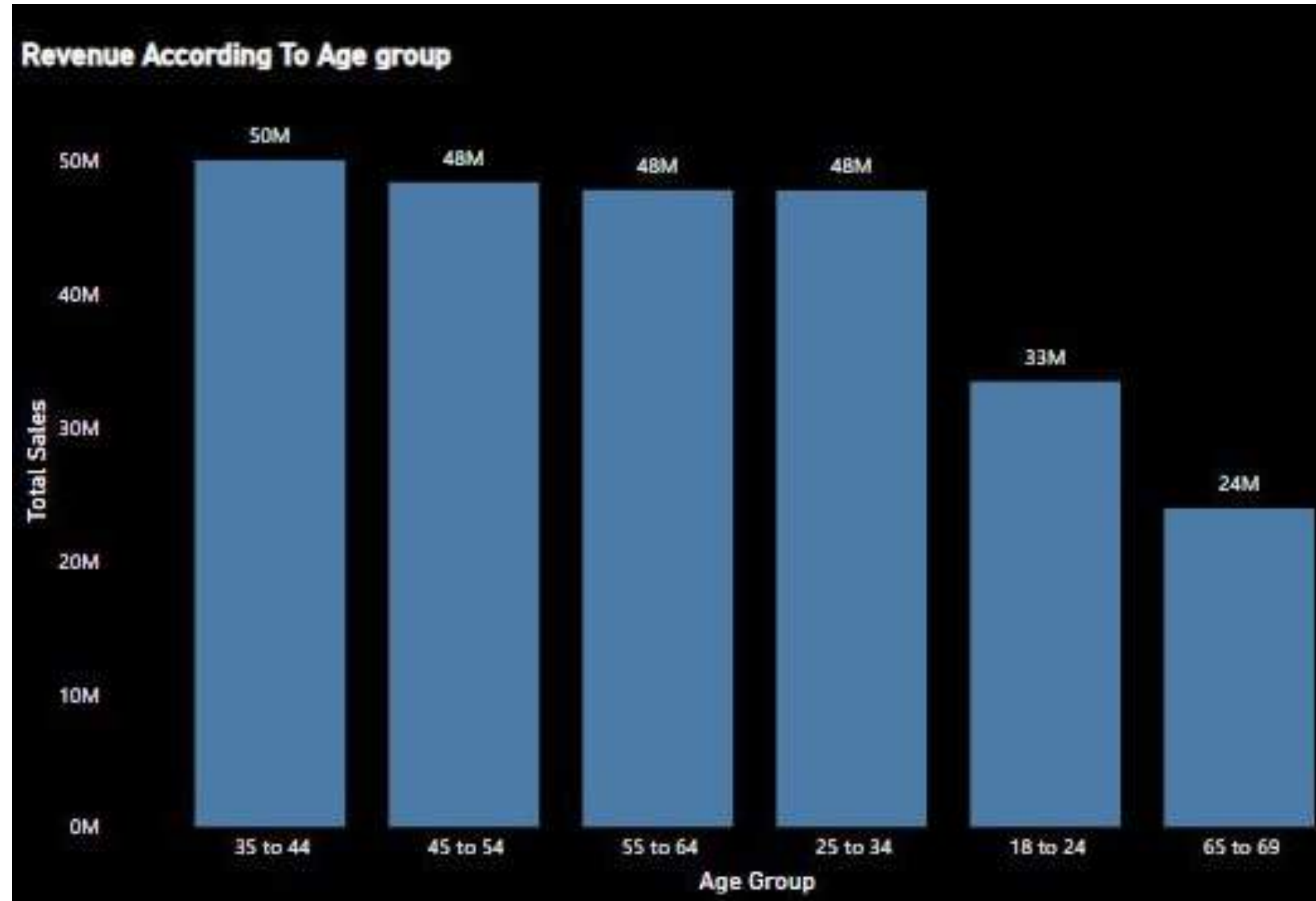
As per the data, the age group between 35 and 44 bought the highest number of products. People between the ages of 25 and 64 contribute most of the sales.

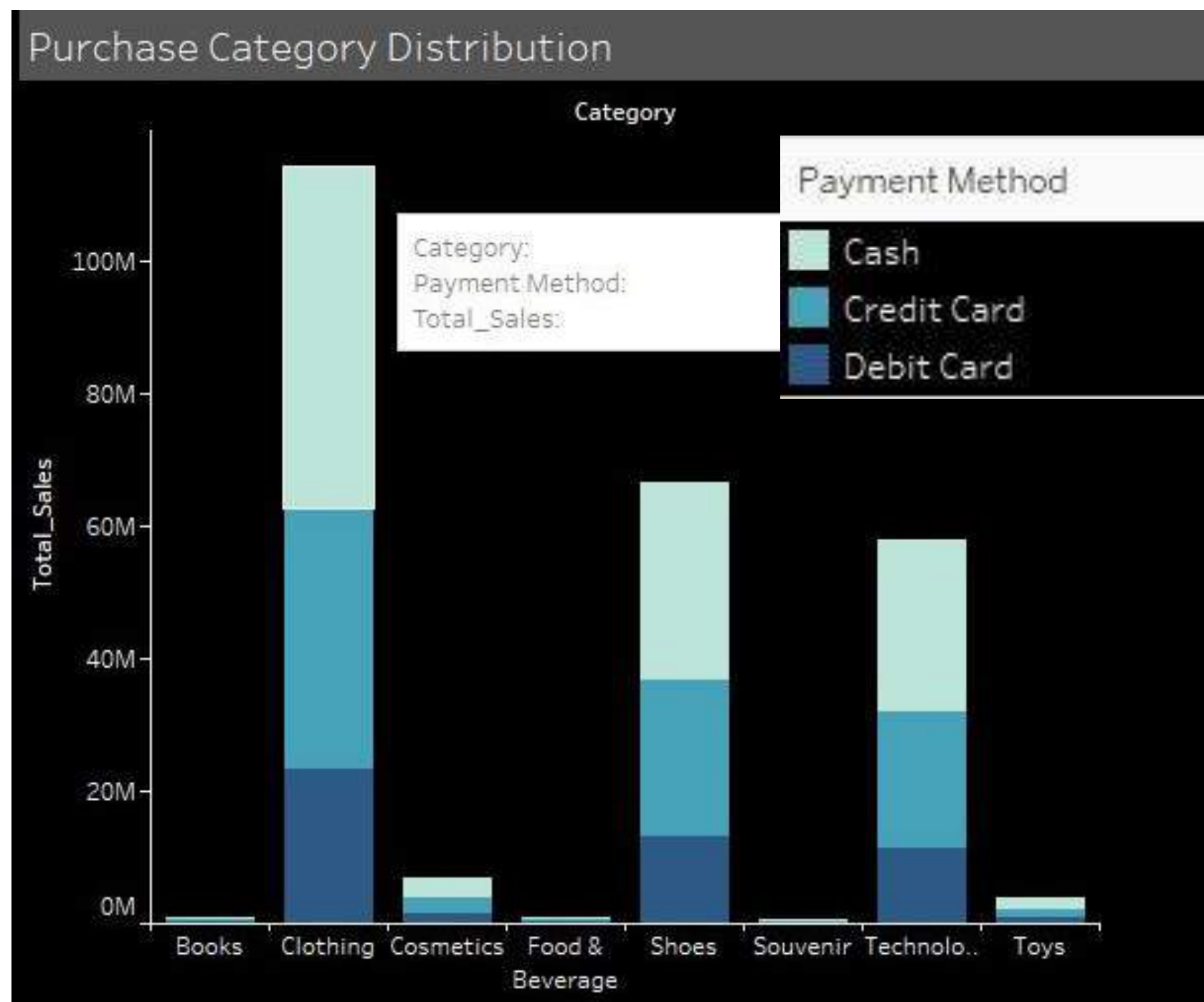




# Revenue By Age Group

Customers in the age group of 35 to 44 generated 50 million, which is the highest of all. Here, the total revenue earned is around 251.51 million.

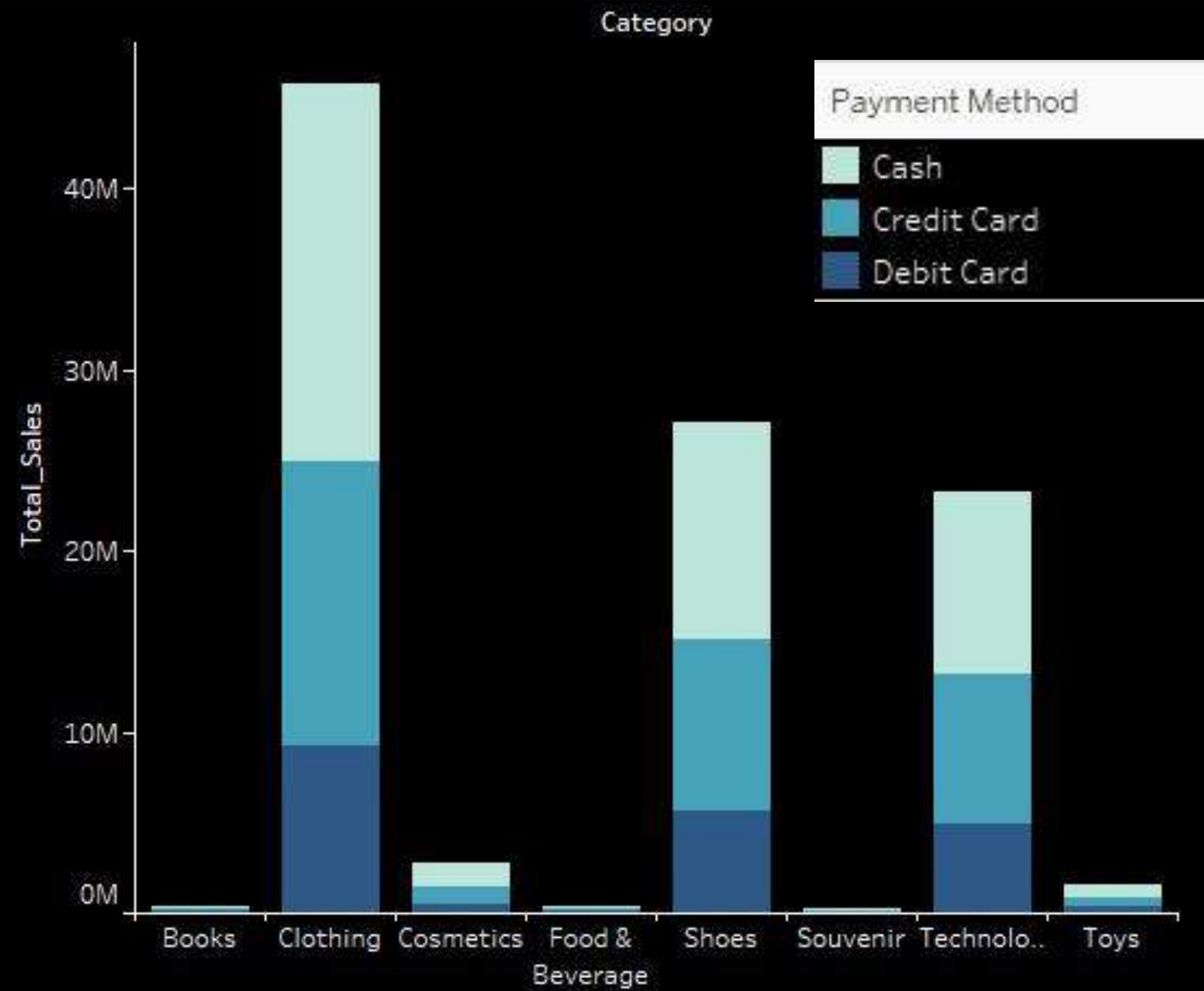




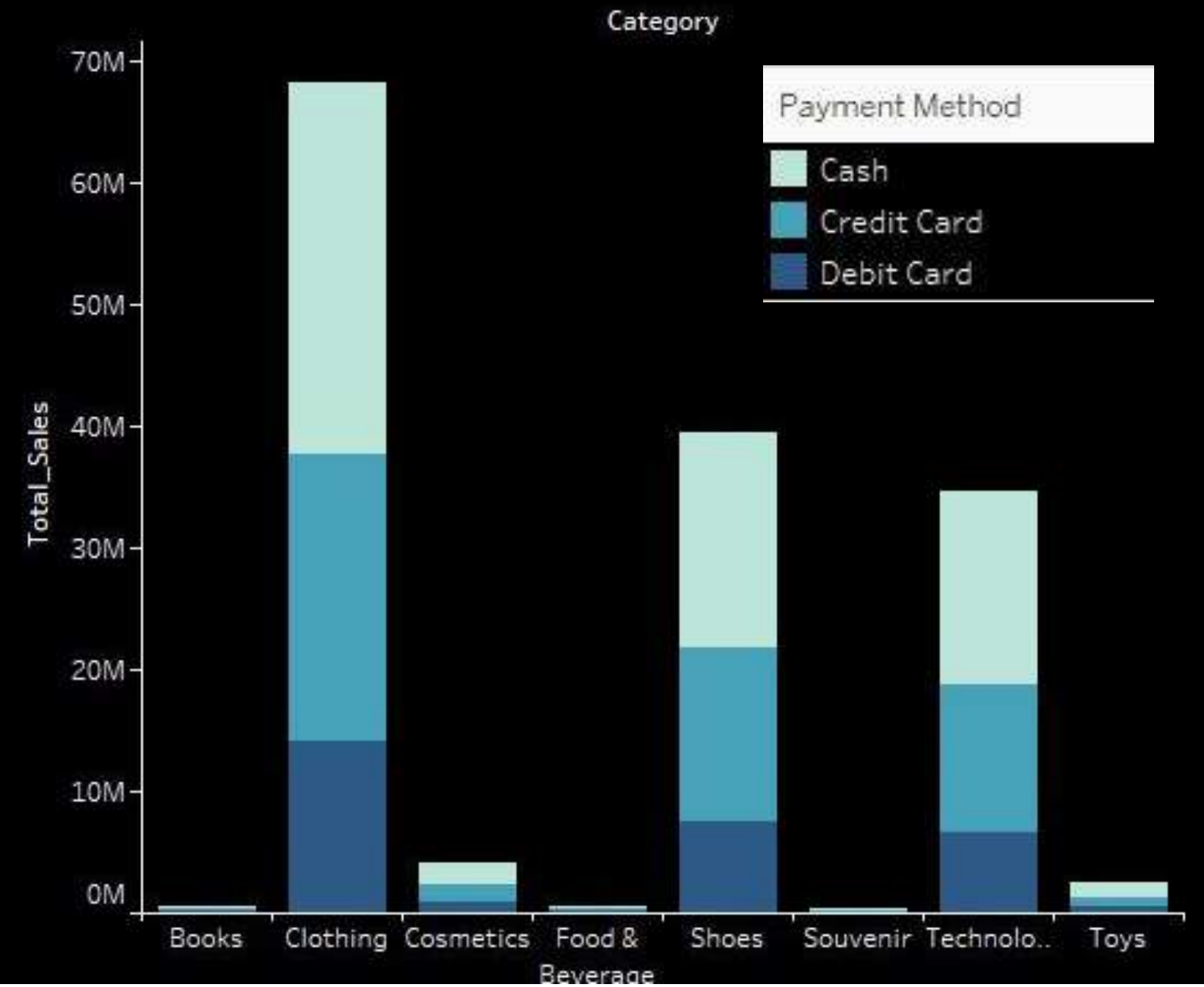
# Purchase Distribution

Most products sold were from clothing category with a value of 113,796,791 and their preferred mode of payment was cash.

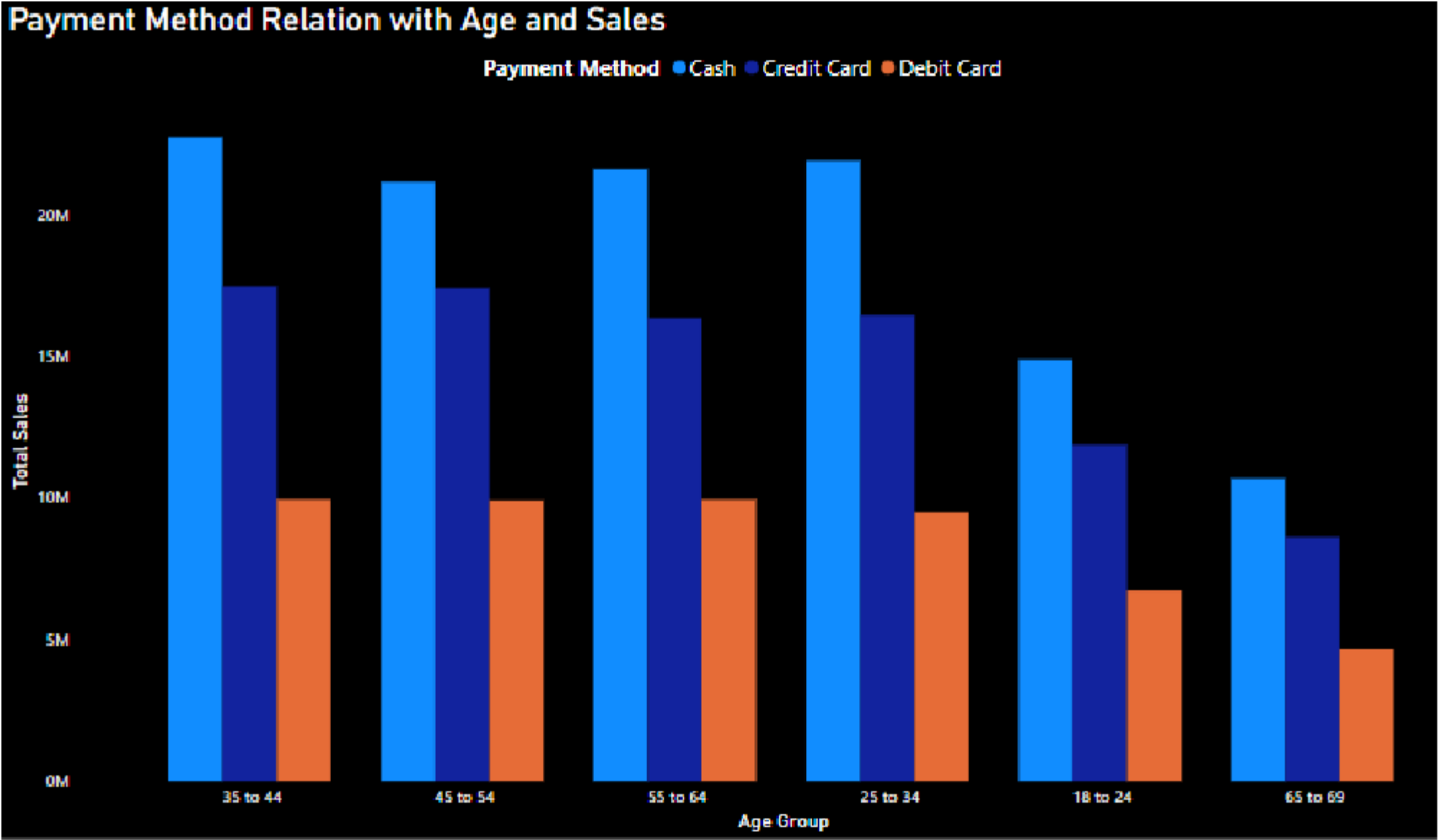
Purchase Category Distribution (Male)



Purchase Category Distribution(Female)



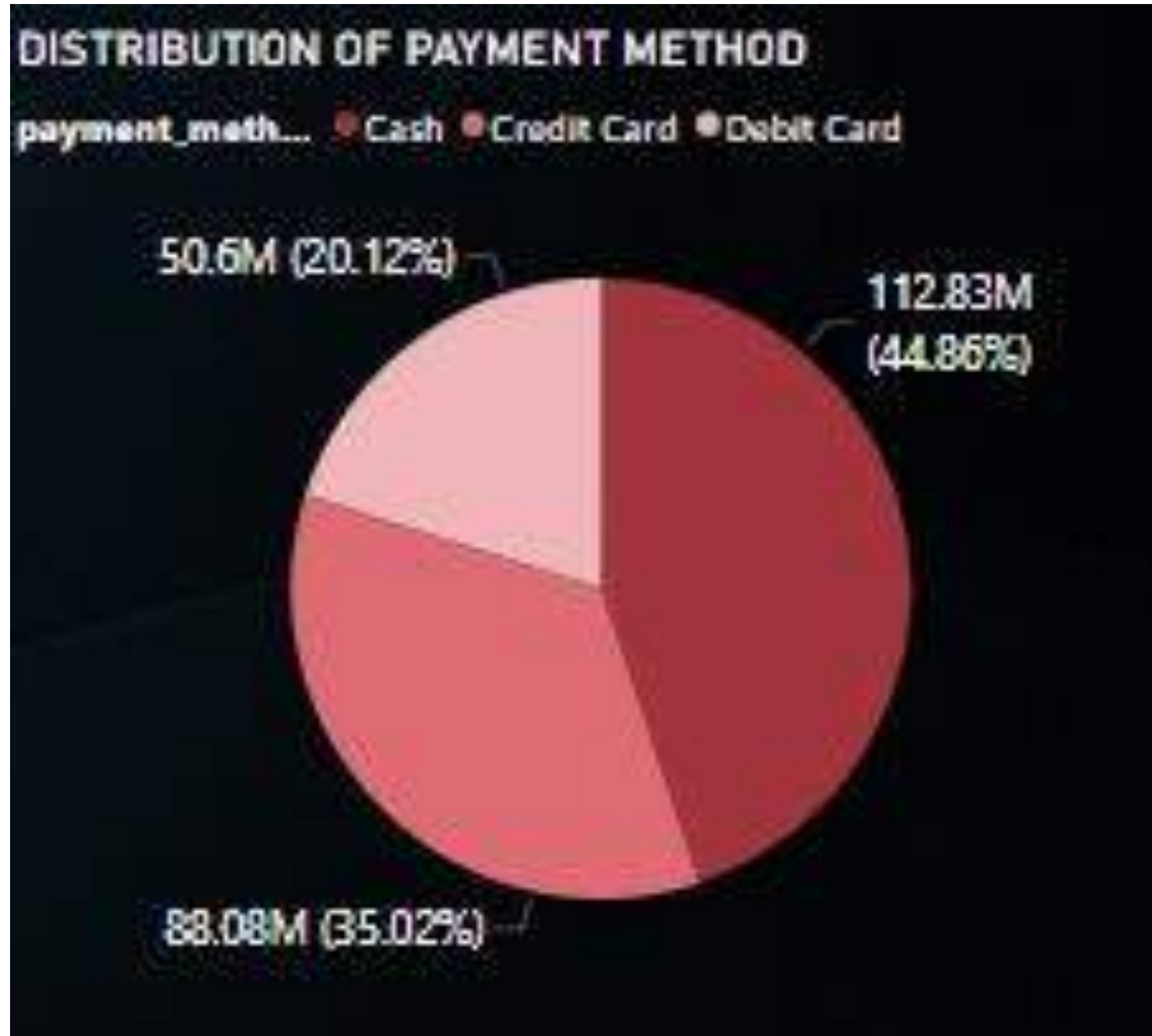




# Payment Method Relation with Others

The chart clearly shows customers aged between 25 and 65 bought more products and most of them used cash as their mode of payment.

Payment Method			
Gender	Cash	Credit Card	Debit Card
Female	67,573,638	52,875,810	29,757,688
Male	45,258,605	35,201,314	20,838,740



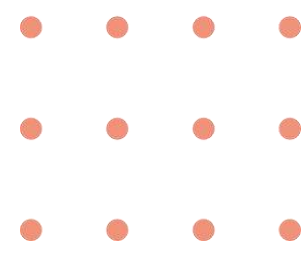
# Distribution of Payment Method

Customers prefer to pay cash for the purchase. However, many choose a credit card too as their payment method.

# Data Visualization

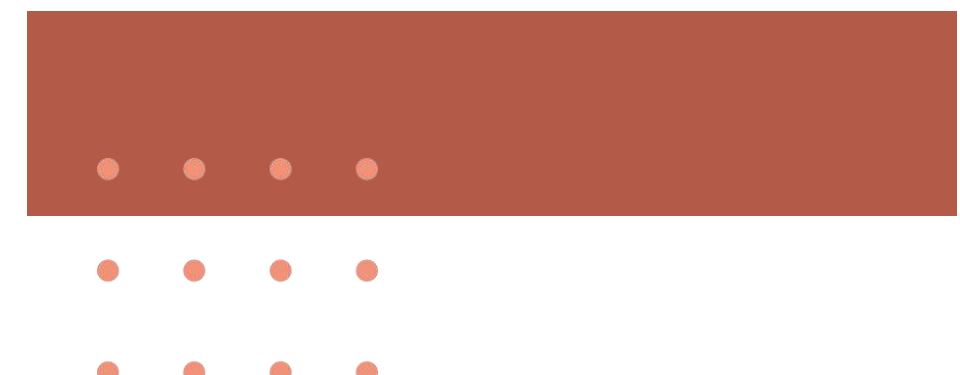
You can also view the dashboard on customer segmentation analysis. We have uploaded it along with the presentation.





# Suggestions

- Now that we know, women buyers are more. You can give discounts on a particular day or put offers on products made for women.
- People aged between 25 and 65 purchased most of the products. Adding more products of their interest can be a good idea.
- Use social media to market the least-purchased products and offer strategic discounts, like seasonal sales. This will create a sense of urgency, and people will get attracted to these products.







# Thank You

The data helped in identifying purchasing pattern similarities of people in different customer segments. With enhanced experience, businesses can maximize their profit.

