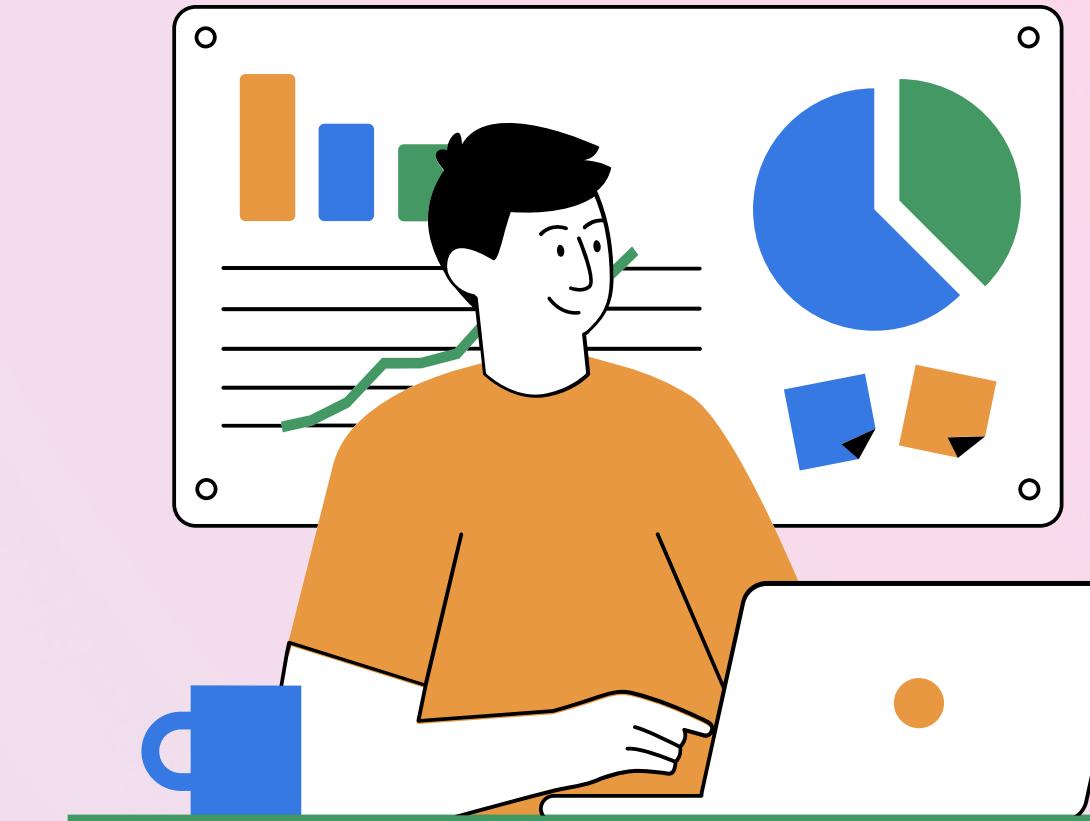


# Sales & Marketing Analysis





# Introduction



**In today's competitive e-commerce landscape, understanding customer behavior and optimizing sales strategies are crucial for business success.**

**This analysis aims to provide comprehensive insights into various aspects of e-commerce performance, such as user engagement, campaign effectiveness, product sales, and customer retention.**



## Problem Statement

- **Funnel Optimization and Campaign Effectiveness:** Identify stages in the user journey with significant drop-offs and evaluate the impact of marketing campaigns on driving user actions and sales.
- **Product and Customer Performance Analysis:** Assess the performance of different product categories and individual items, and analyze customer behavior to identify high-value customers and potential churn risks



# Agenda

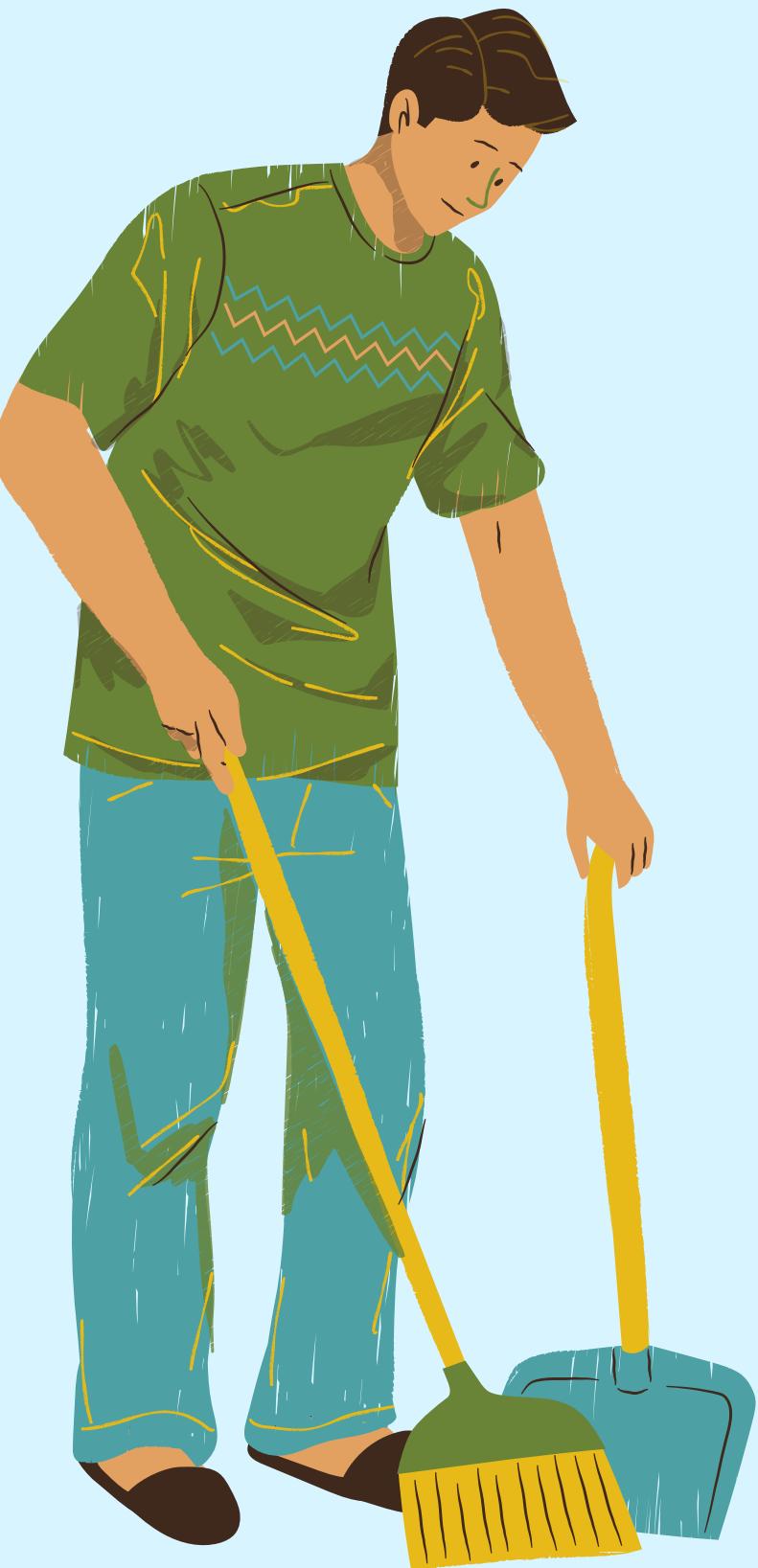
- Funnel Analysis
- Campaign Effectiveness
- Customer Behavior Analysis
- Product Performance
- Monthly Sales and Customer Retention

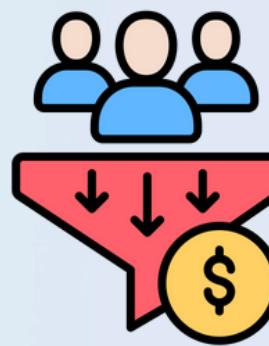




# Data Cleaning

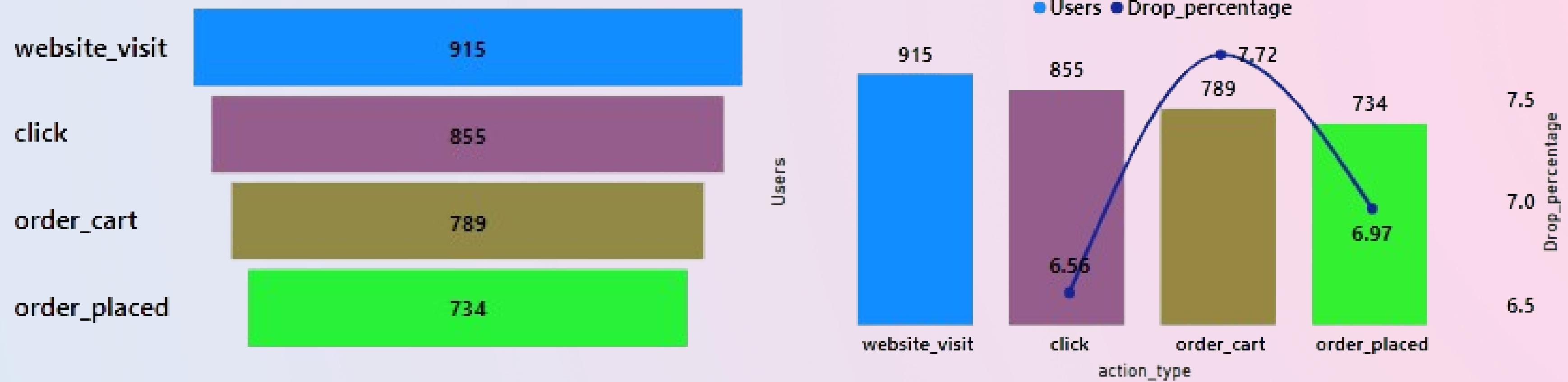
```
1  -- Data cleaaning
2 • ALTER TABLE dim_campaigns
3   MODIFY COLUMN start_date DATE;
4
5 • ALTER TABLE dim_campaigns
6   MODIFY COLUMN end_date DATE;
7
8 • ALTER TABLE dim_date
9   MODIFY COLUMN date DATE;
10
11 • UPDATE dim_date
12   SET date=DATE_FORMAT(Date,'%Y-%m-%d');
13
14 • ALTER TABLE dim_users
15   MODIFY COLUMN date_of_birth DATE;
16
17 • ALTER TABLE fact_action
18   MODIFY COLUMN action_timestamp TIMESTAMP;
19
20 • ALTER TABLE fact_orders
21   MODIFY COLUMN date DATE;
22
23 • UPDATE fact_orders
24   SET date=DATE_FORMAT(Date,'%Y-%m-%d');
```



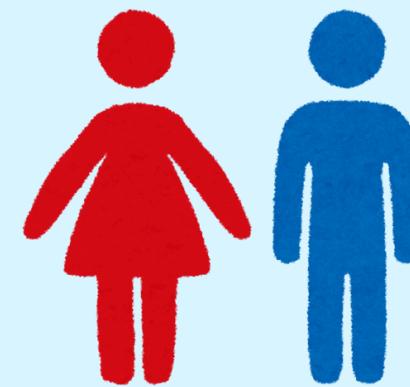


# Overall Funnel Analysis

•••

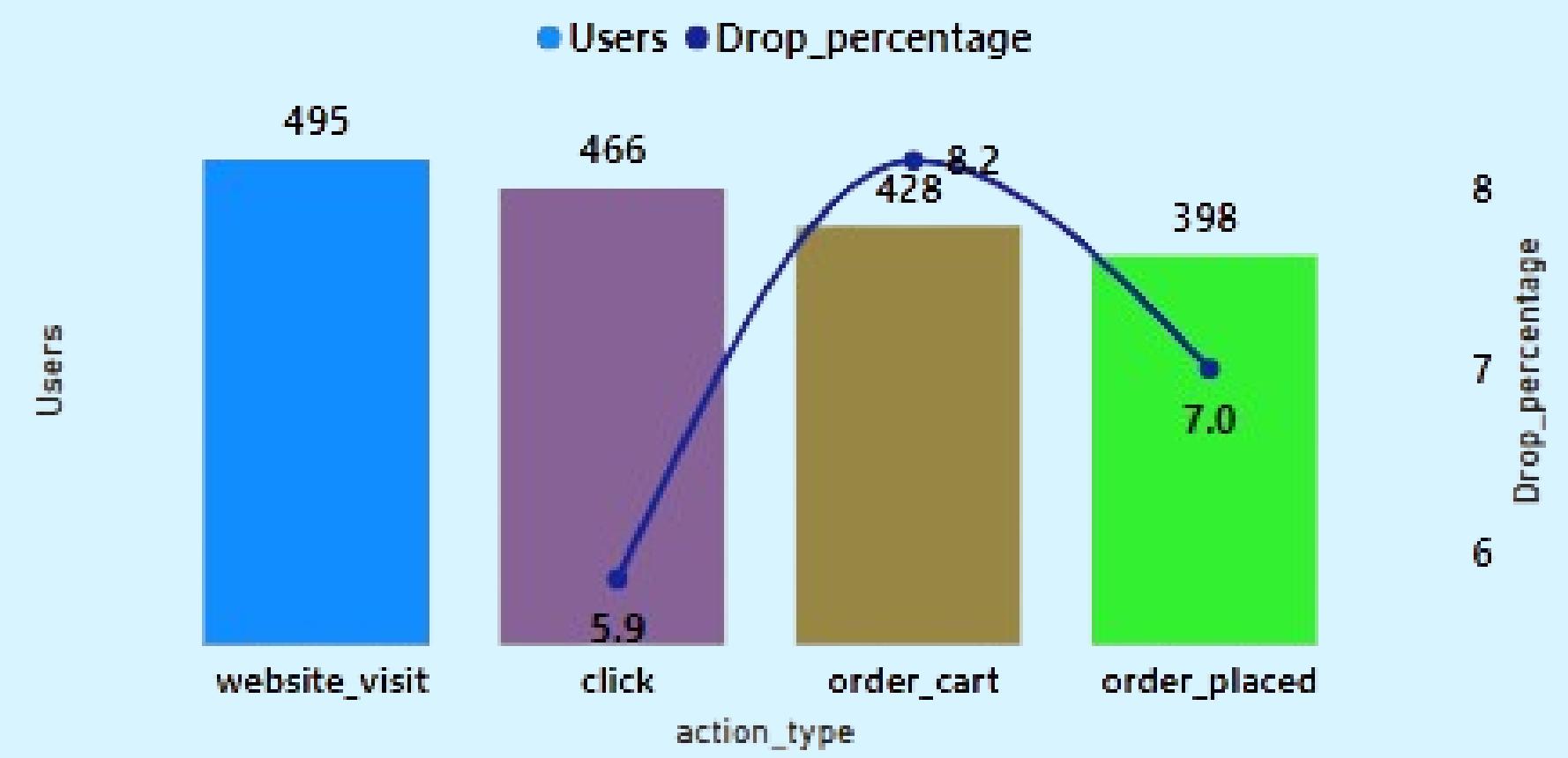
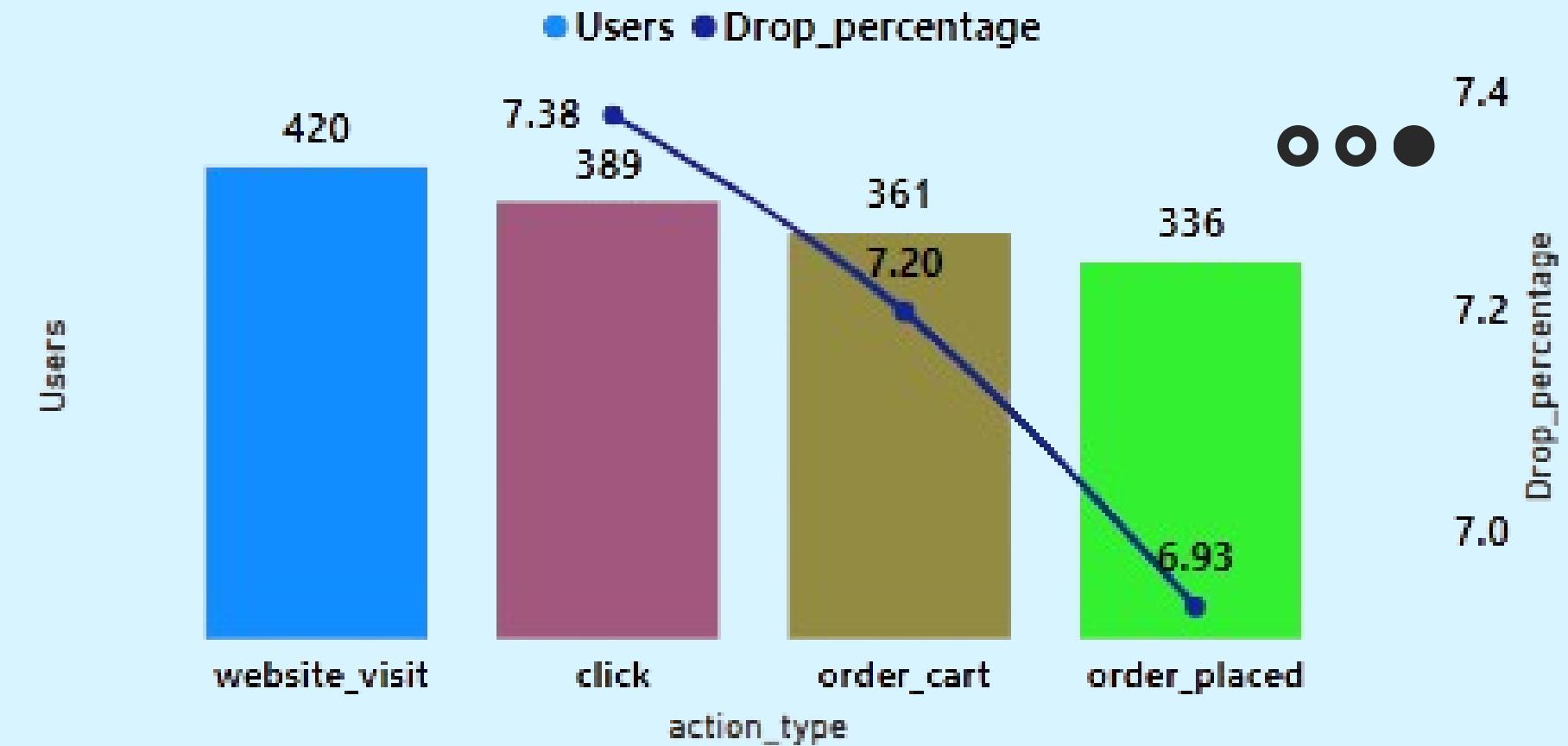


- From the overall funnel analysis we can see that approximately 80% of total users placed an order. Website conversion rate is **80.22%**
- Drop percentage is **highest in order\_cart stage(7.72%)** as compared to other stages.



# Gender wise Funnel

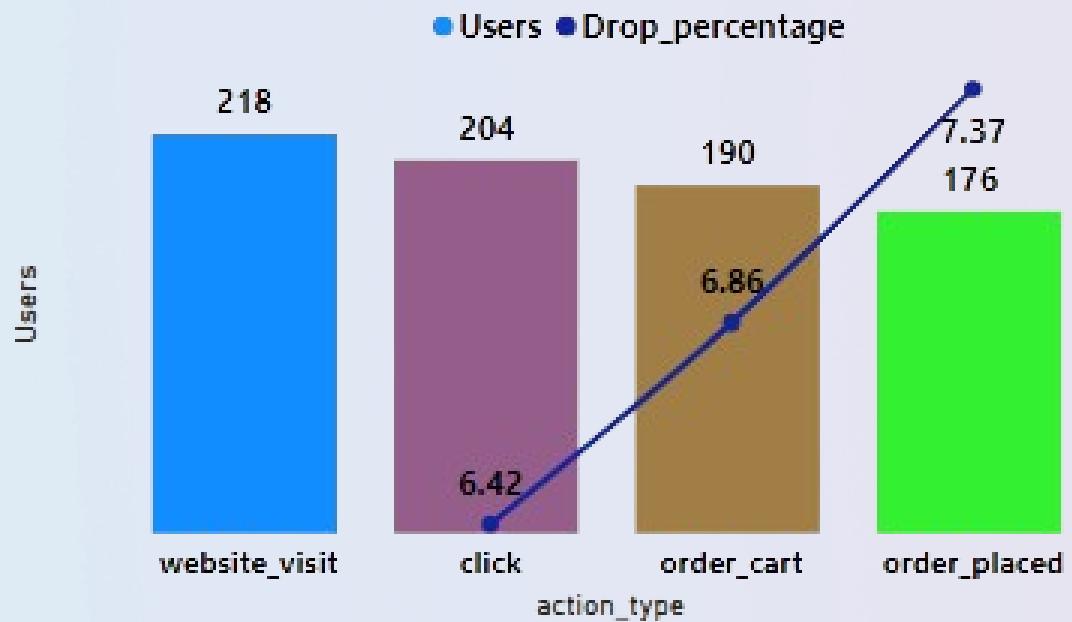
- For Males overall conversion rate is 80% and for female conversion rate is 80.40%
- For Males drop off percentage is reducing in each stage but for female drop off percentage increased in **order\_cart** stage.



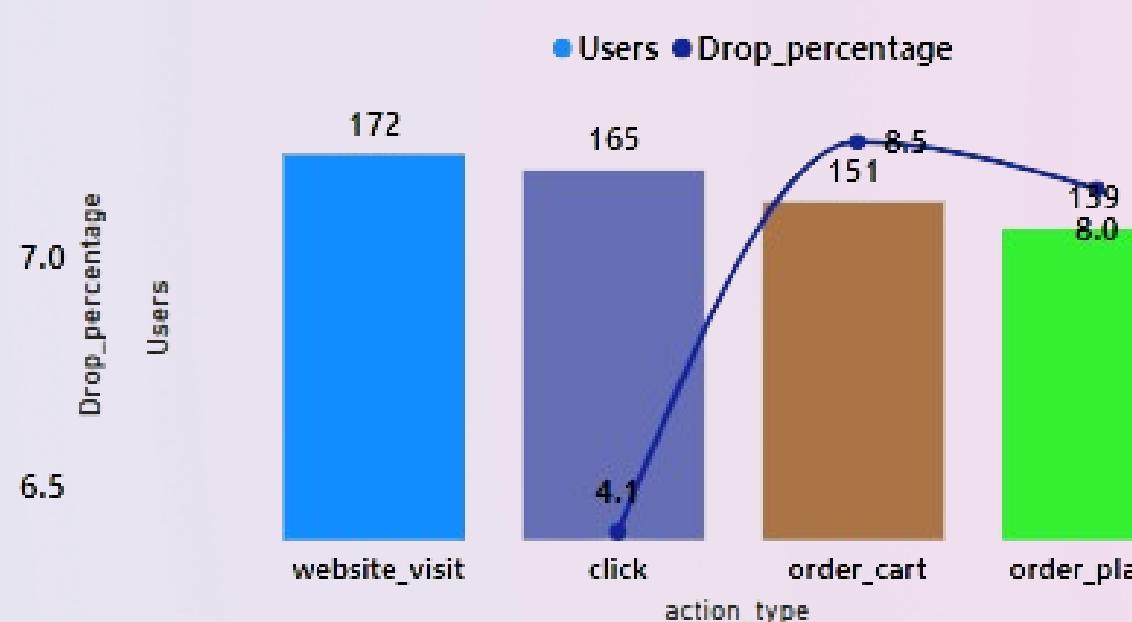


# Age Group wise Funnel

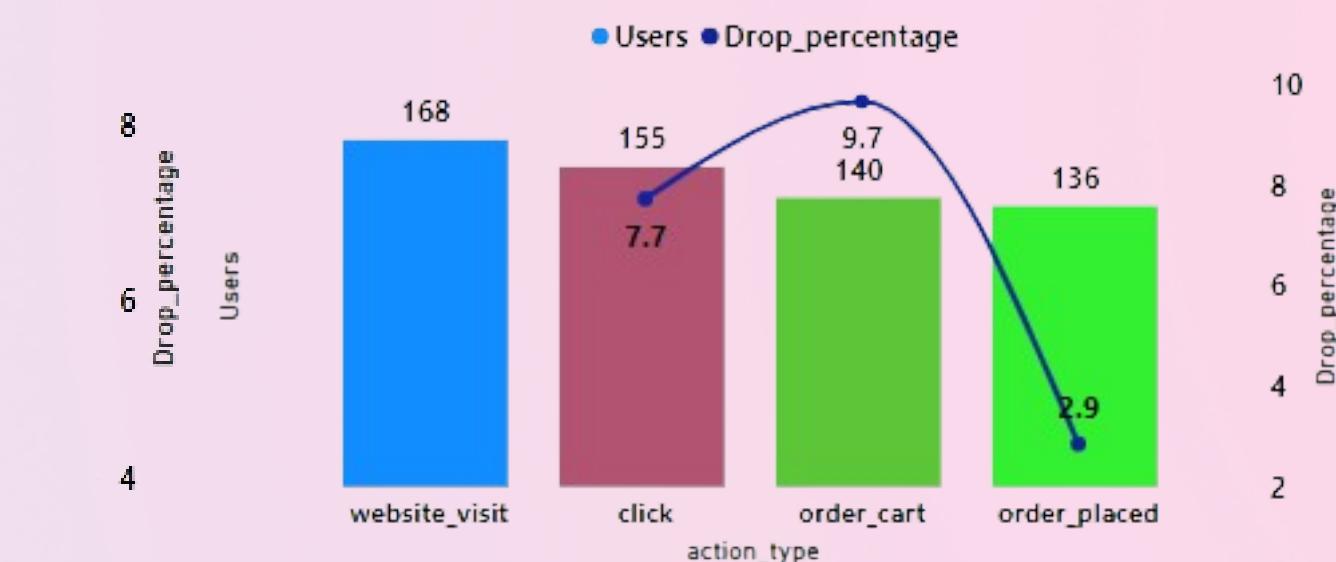
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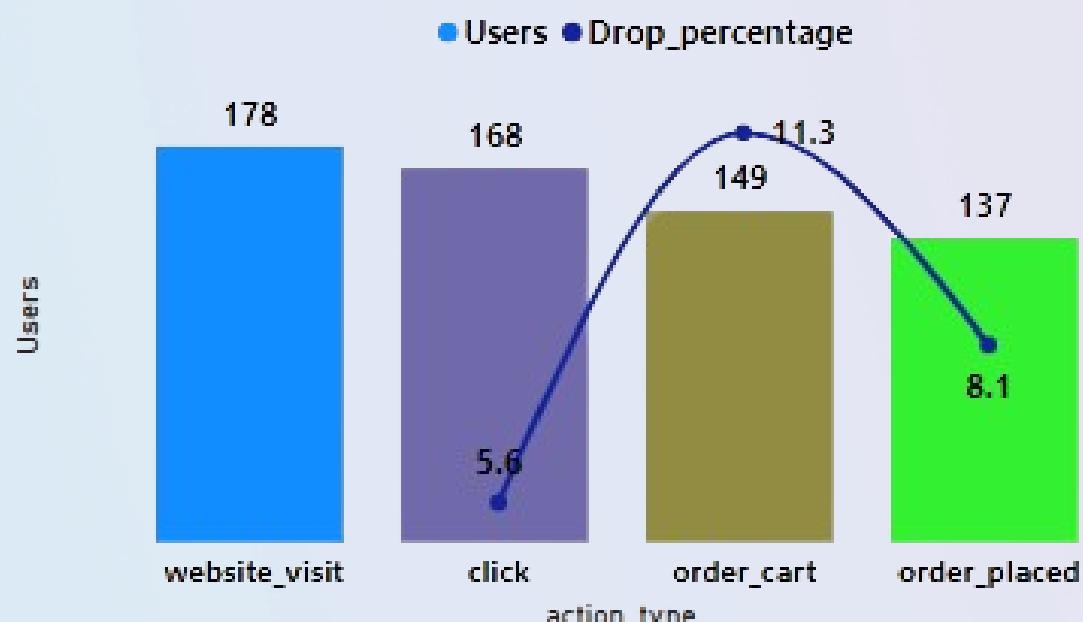
18-30



41-50



51-60

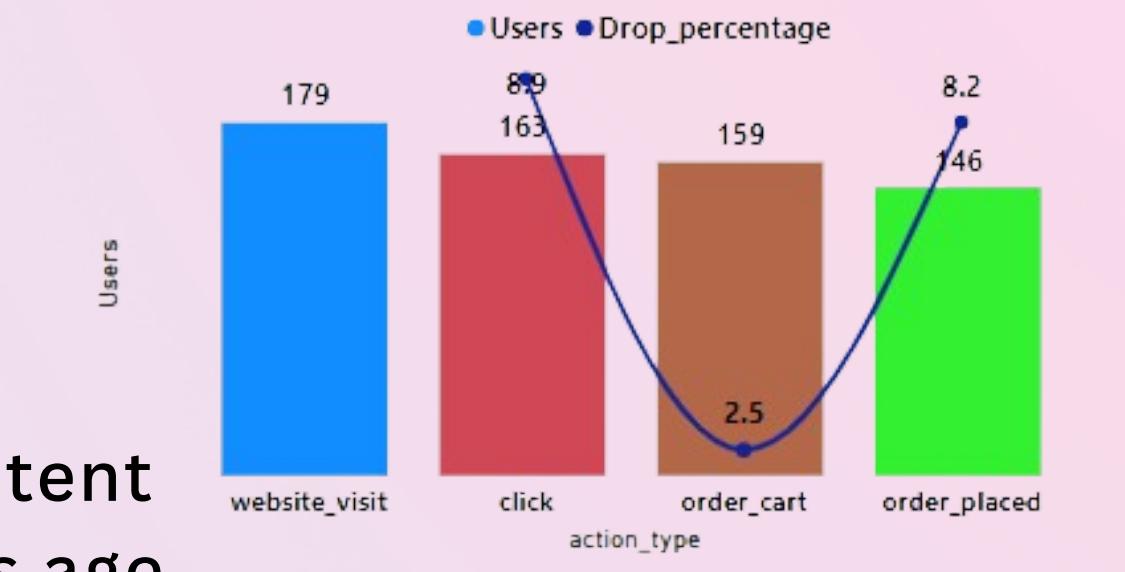


31-40

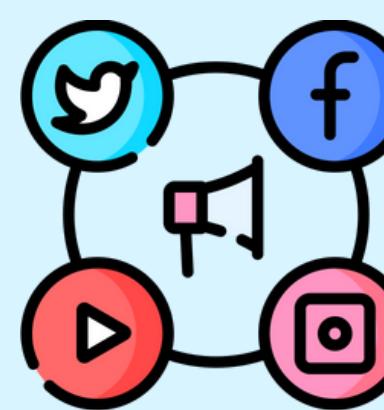
The final conversion rates,

- 18-30 age group - 80.73%
- 31-40 age group - 76.97%
- 41-50 age group - 80.81%
- 51-60 age group - 80.95%
- 60+ age group - 81.56%

This indicates relatively consistent overall conversion rates across age groups



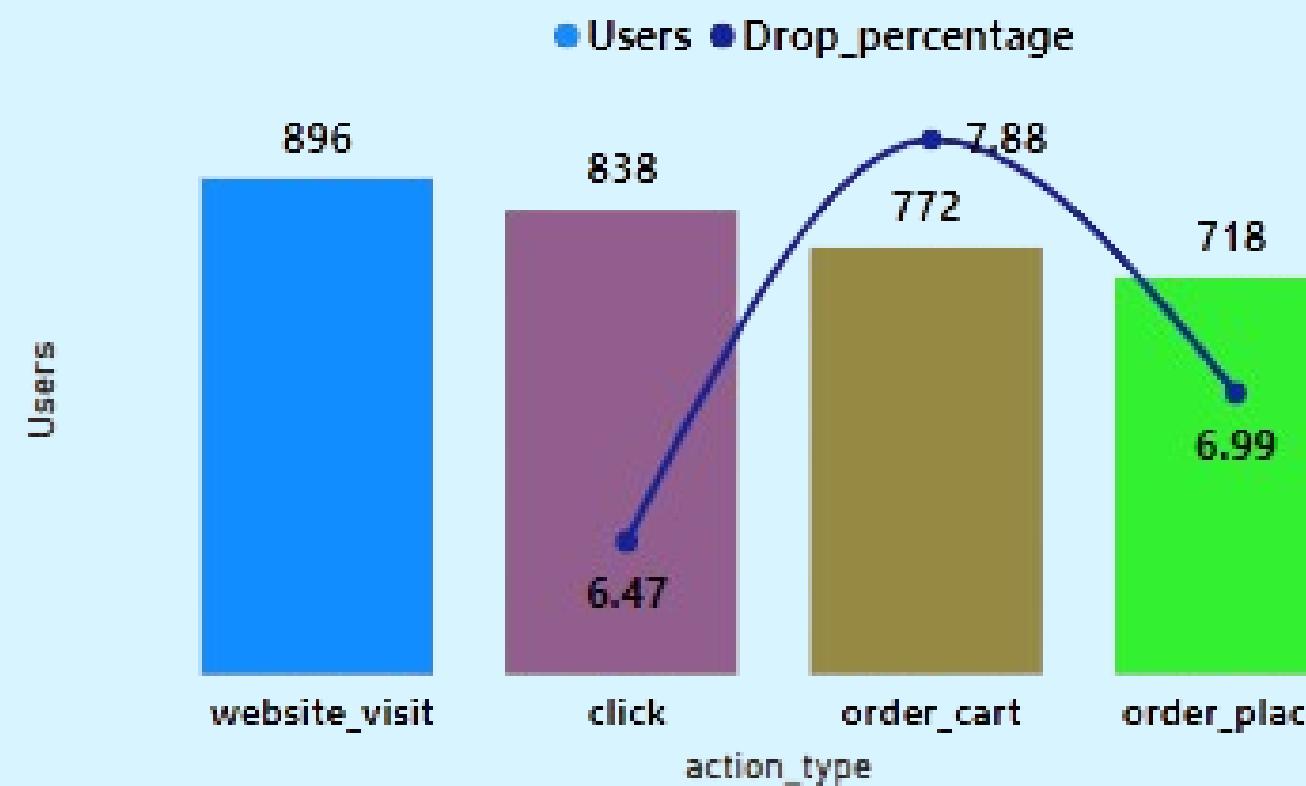
60+



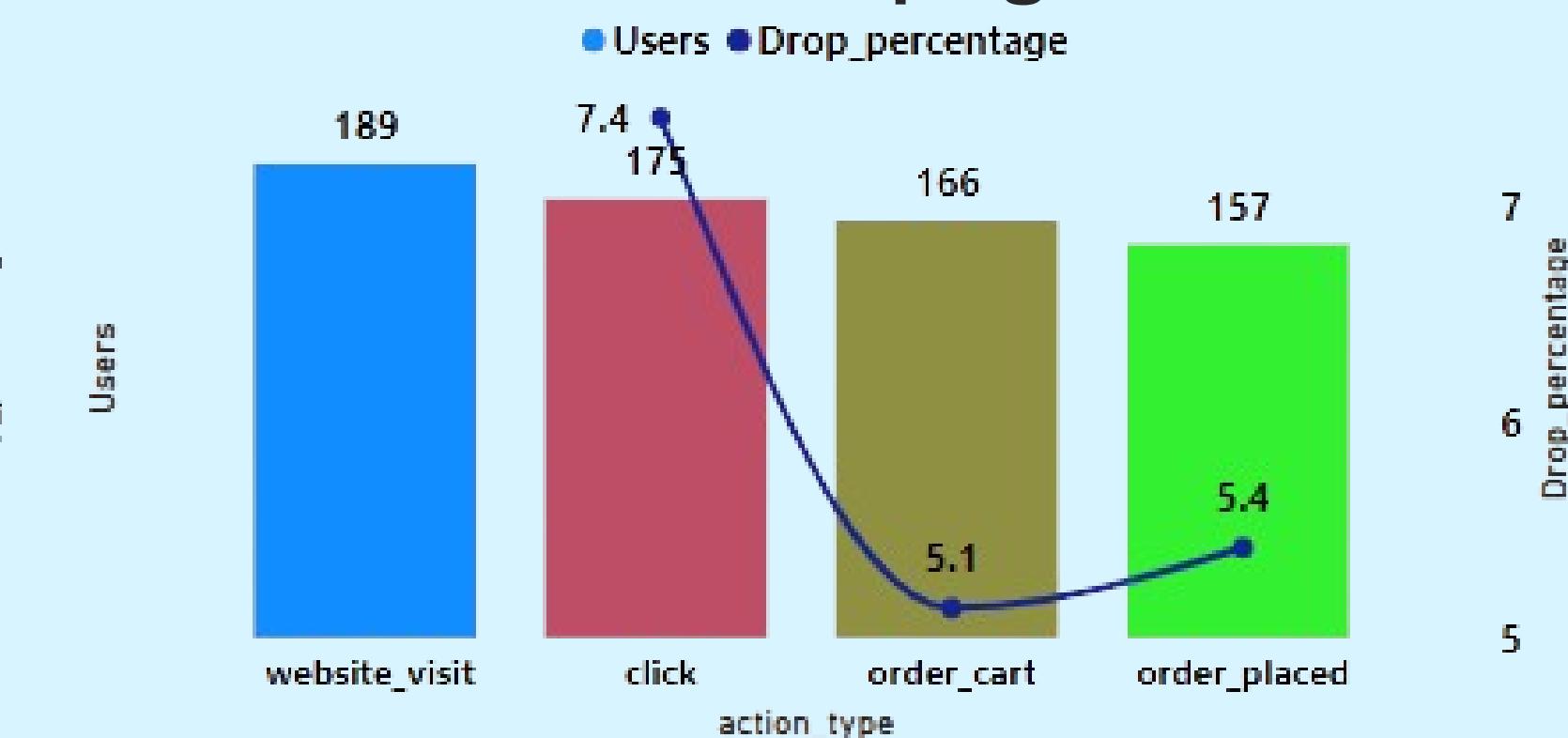
# Campaign & Non Campaign Funnel

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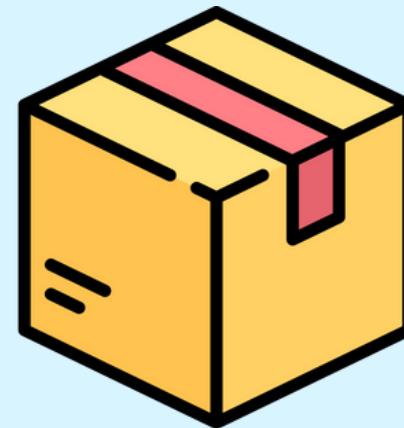
## Campaign



## Non Campaign

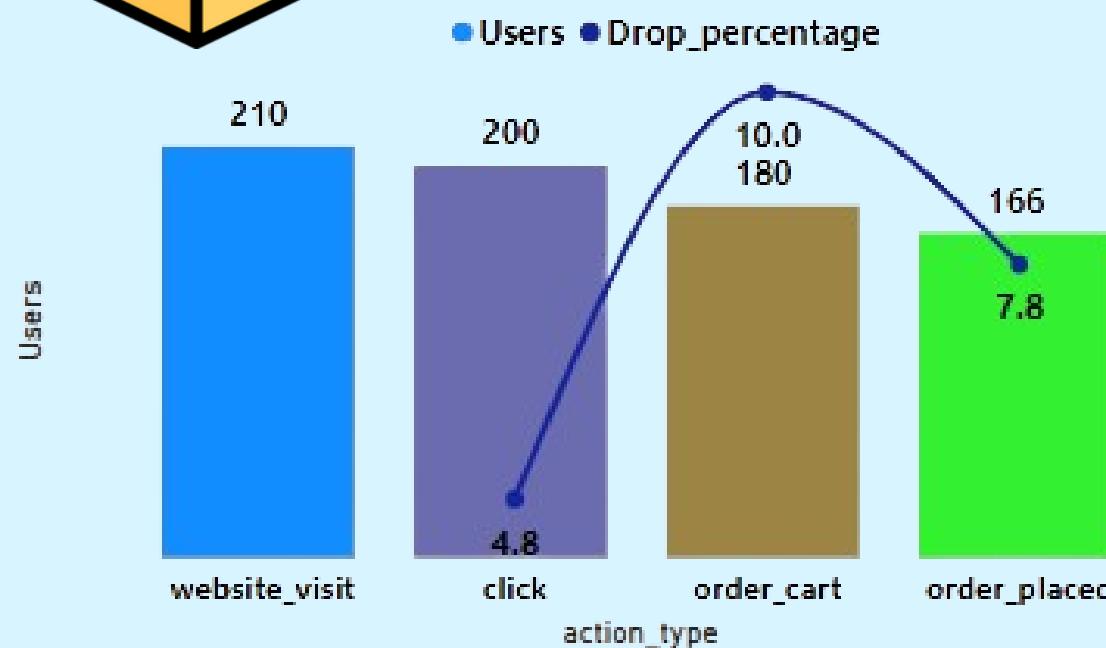


- Though drop off percentage is quite **higher in order\_cart and order\_placed stage** during campaign as compared to non campaign but **number of customers placed order is higher during campaign as compared to non campaign.**
- During campaign customers visit website and order place is **4.74** and **4.57** times respectively as compared to non campaign.

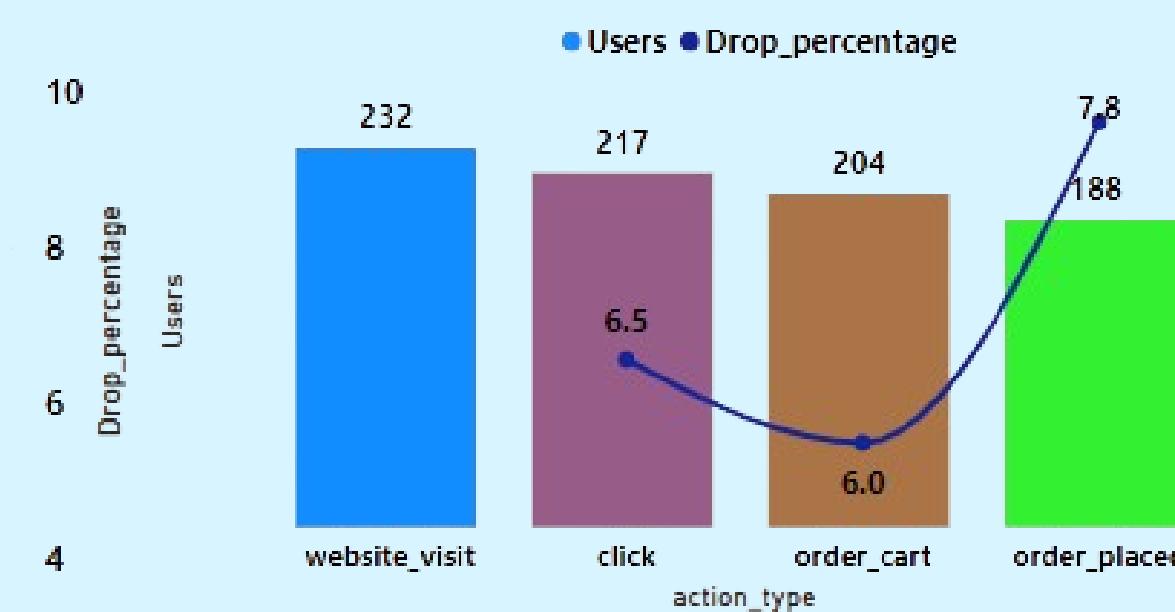


# Product Category Funnel

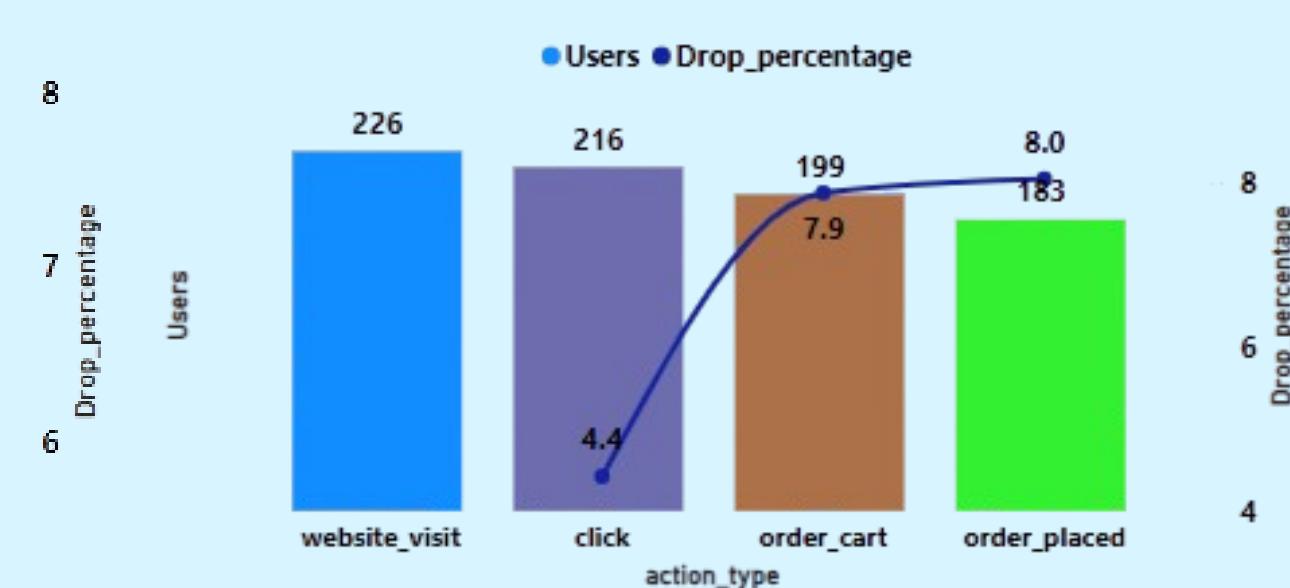
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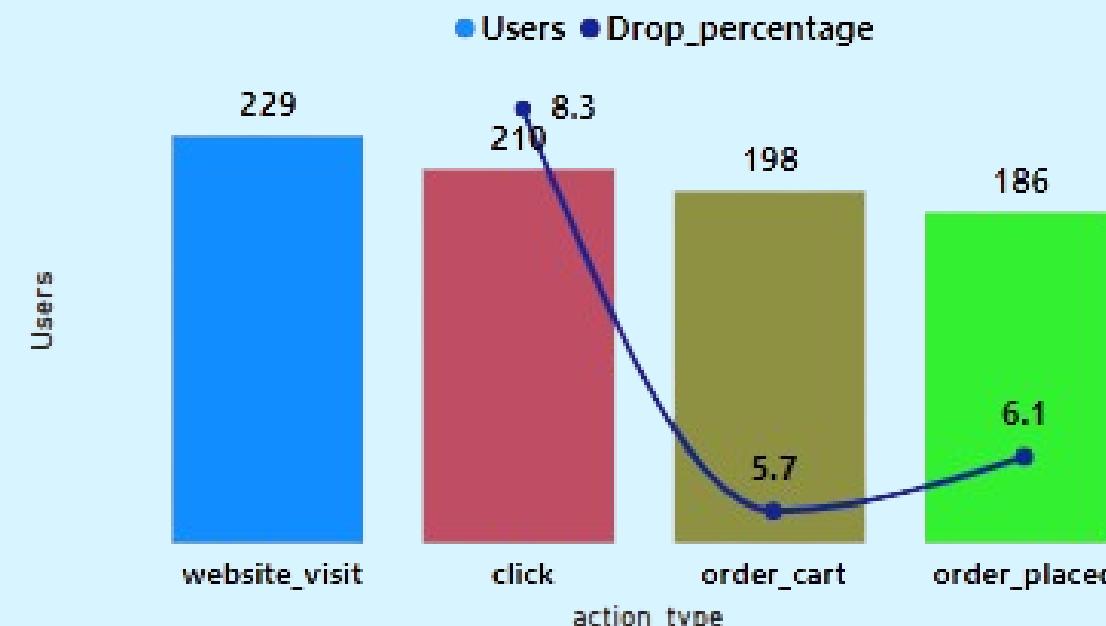
## Books



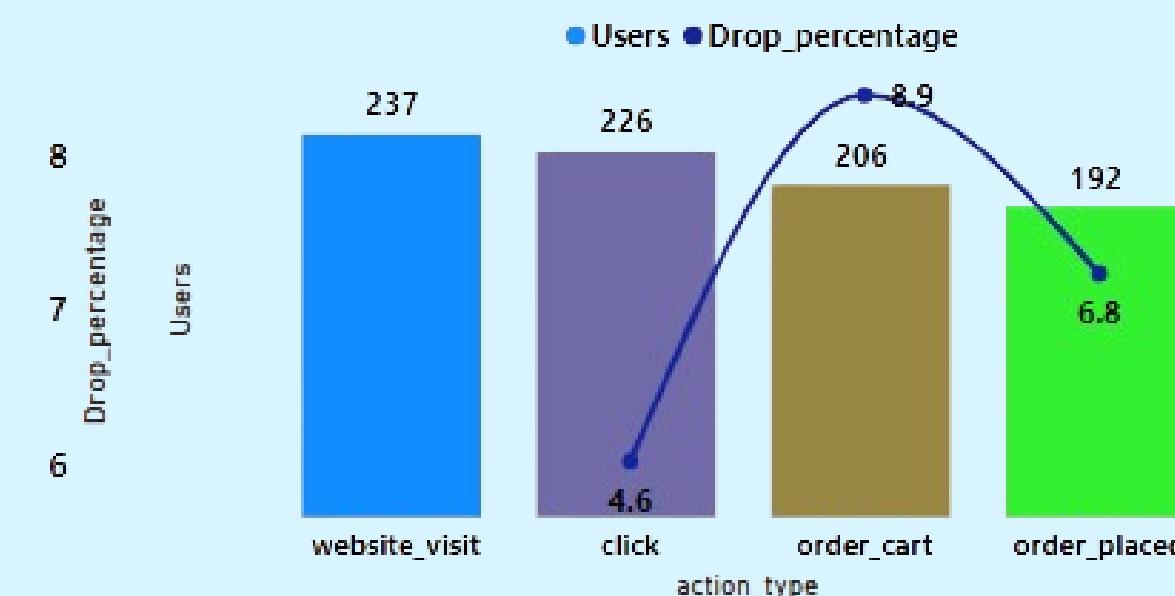
## Fashions



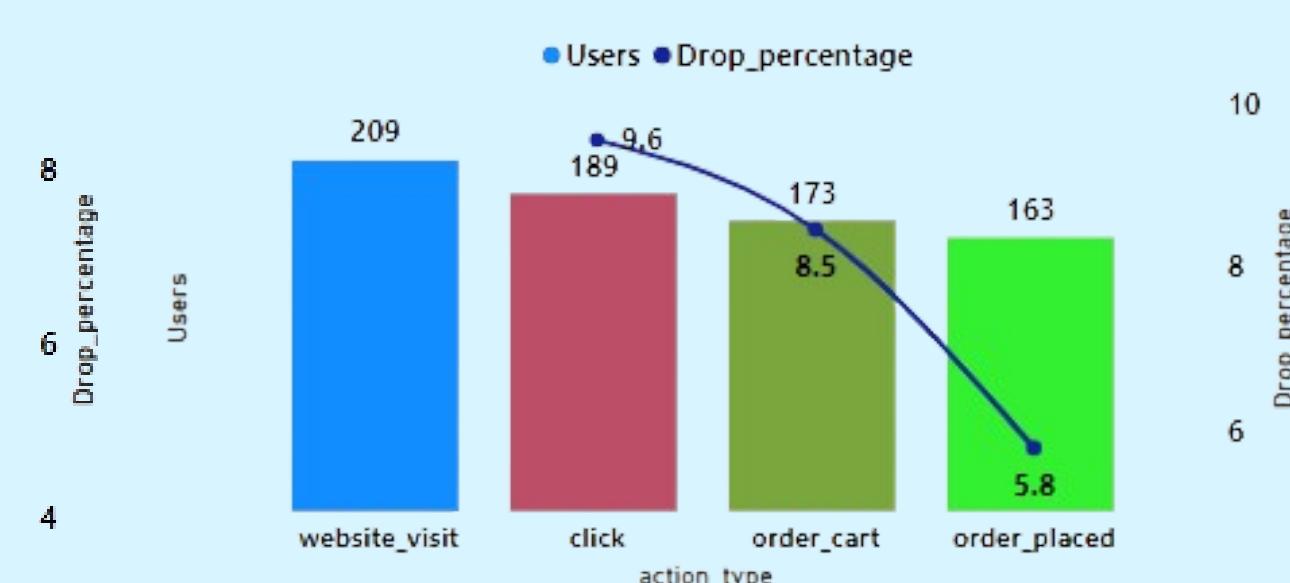
## Health& Personal Care



## Electronics



## Groceries

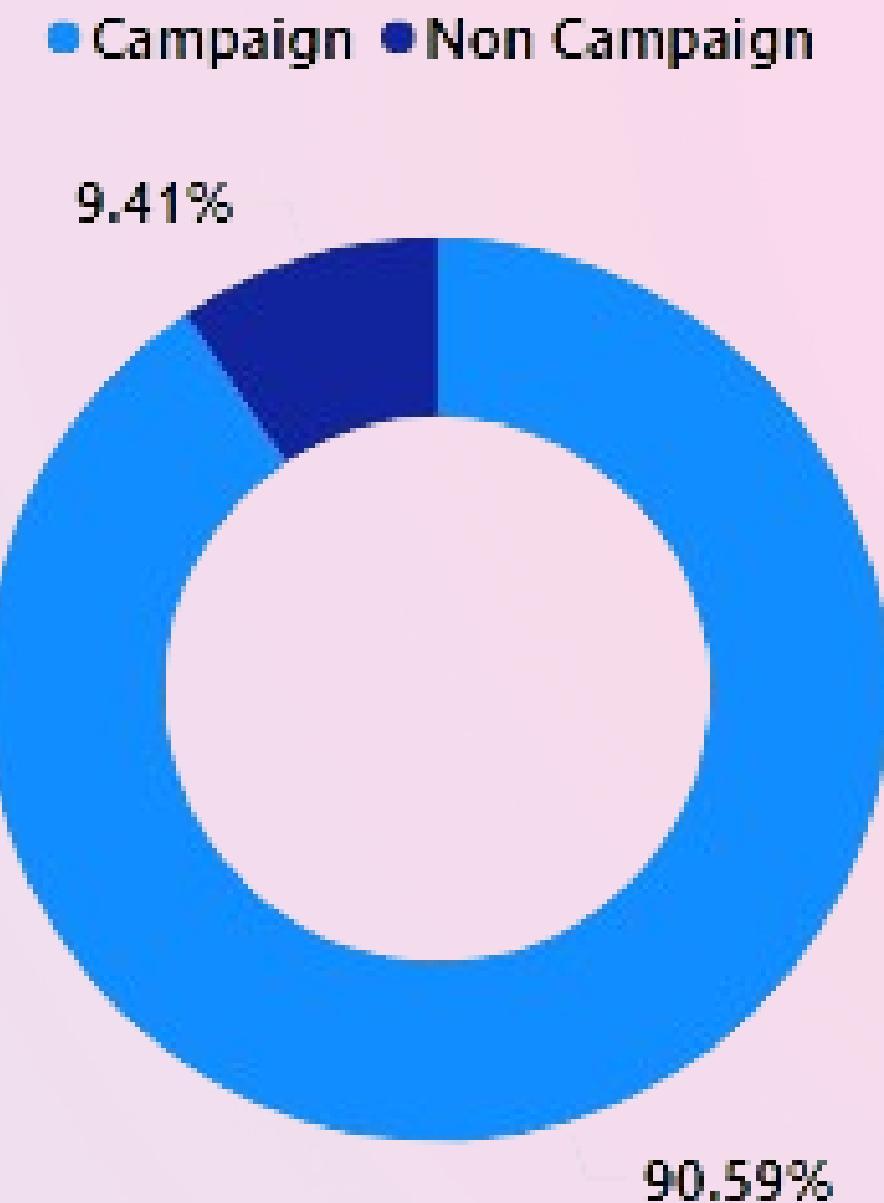


## Home & Kitchen



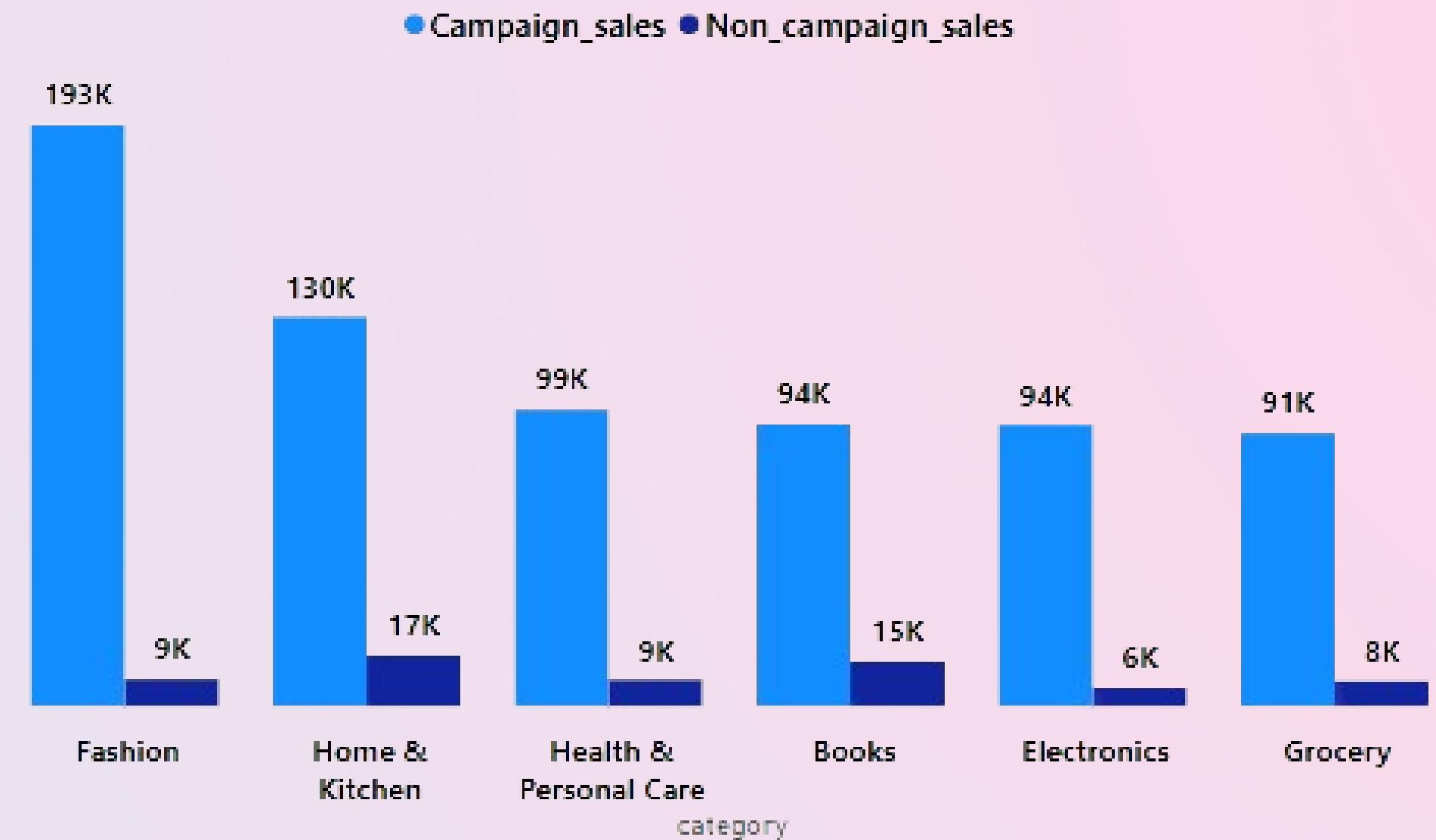
# Campaign vs Non Campaign Sales

- The majority of total sales(90.59%), are generated through **campaigns**, indicating the effectiveness and importance of campaigns in driving sales.
- Given the high percentage of sales from campaigns, the **company should continue to invest in and optimize their campaign strategies** to maintain and potentially increase their sales performance



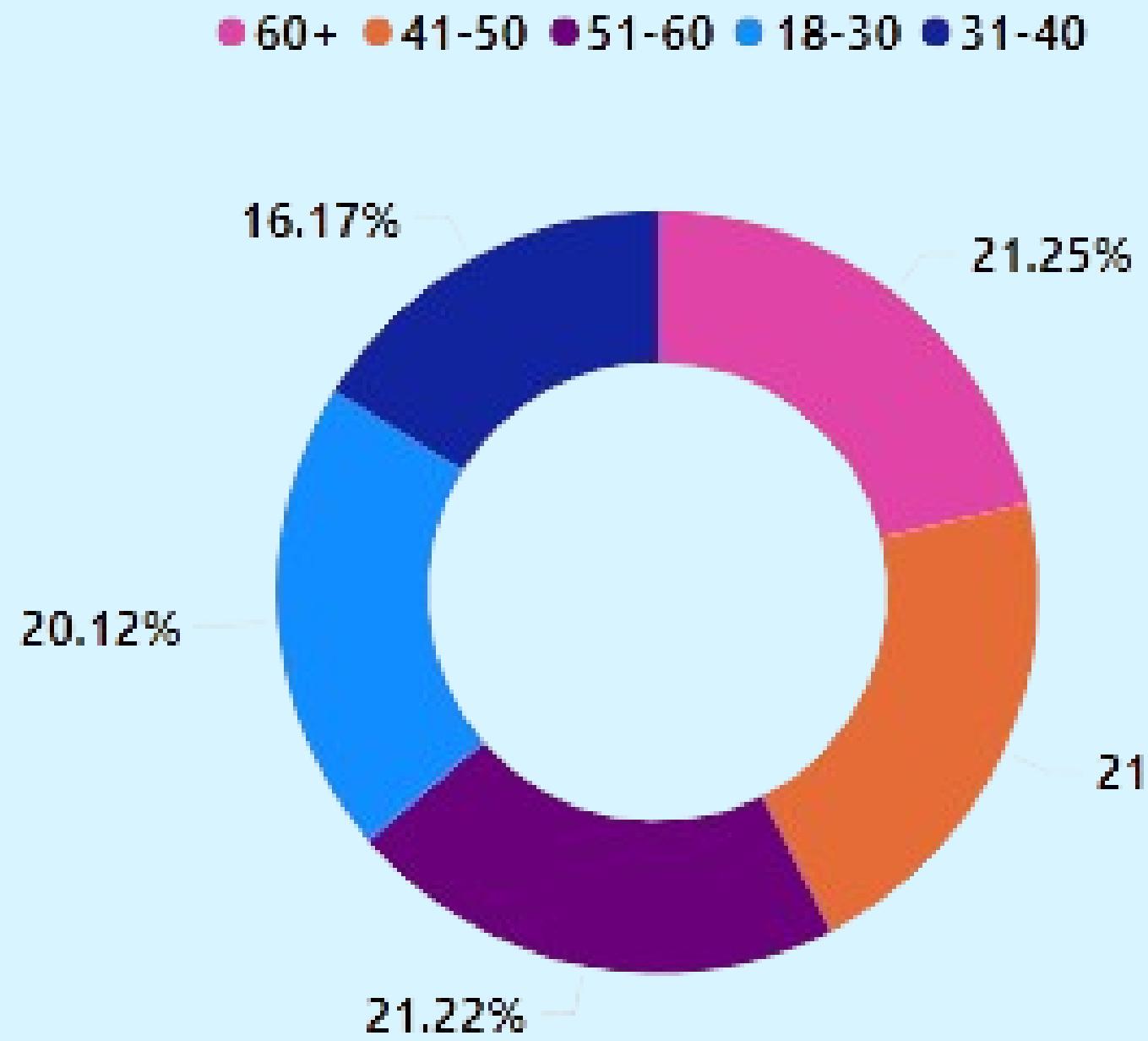
# Campaign vs Non Campaign Category Sales

- **Fashion** and **Home & Kitchen** categories show the **highest sales** figures during campaigns.
- The **Fashion** category has the **highest campaign sales** indicating a strong response to marketing efforts in this segment.





# Age Group wise Revenue Contribution



- The sales contributions are fairly evenly distributed across most age groups contributing around **21-22%** to total sales.
- The **31-40** age group has a noticeably **lower sales contribution percentage (16.17%)** compared to other age groups
- Although the **18-30** age group contributes slightly less (**20.12%**) than the older age groups This suggests that marketing efforts should continue to target this younger demographic to maintain or increase their sales contribution.



# User Ordering Intervals

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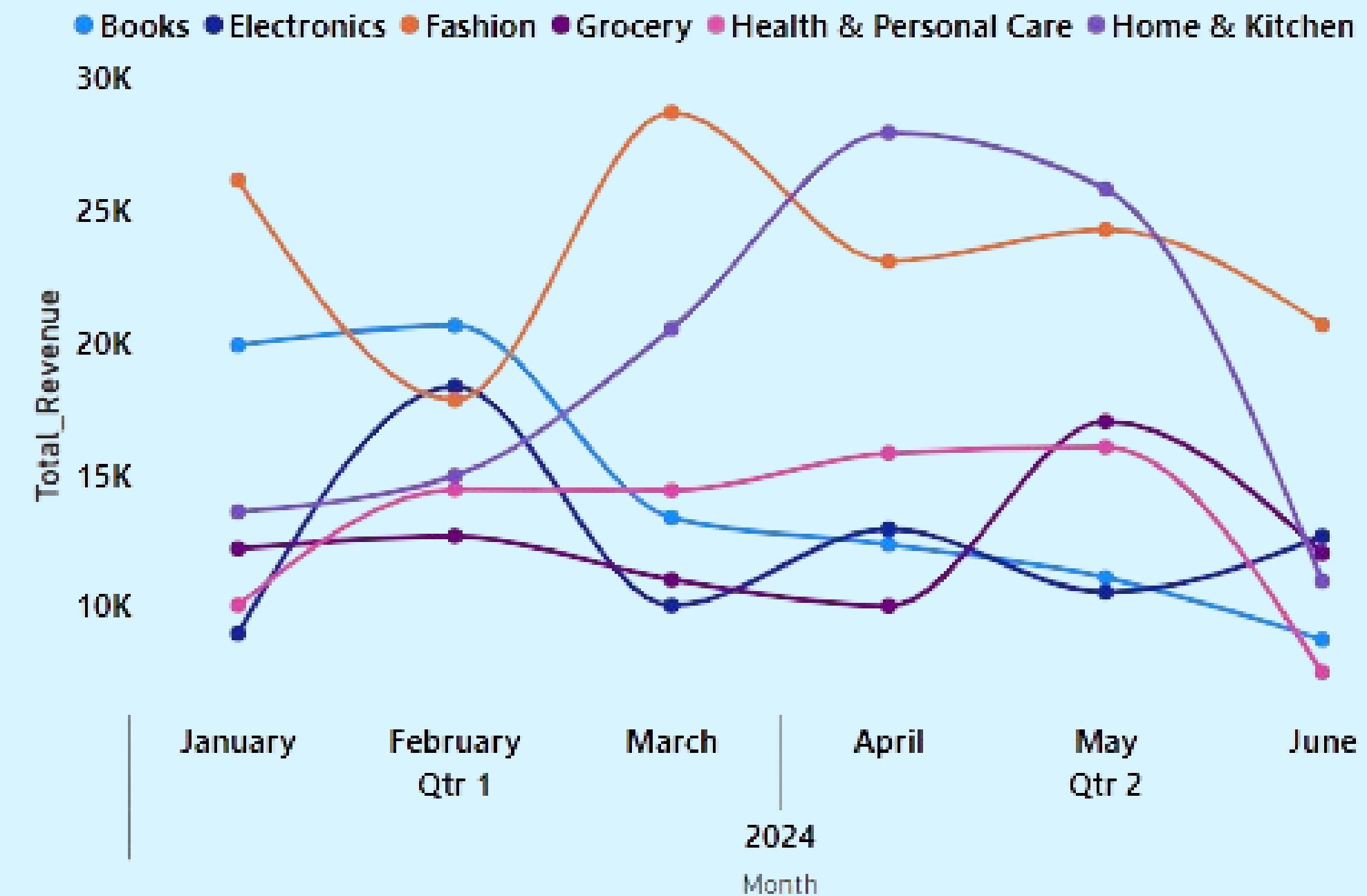
- The majority of users place their consecutive orders within 8 to 60 days, suggesting a strong preference for monthly or bi-monthly purchases.
- 178 users have a very short interval of 0 to 7 days between consecutive orders, indicating very frequent purchasing behavior.
- Only 120 users have long gaps of over 90 days between their orders, reflecting much less frequent purchasing patterns.

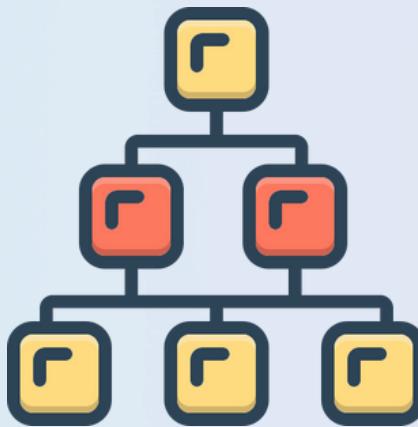




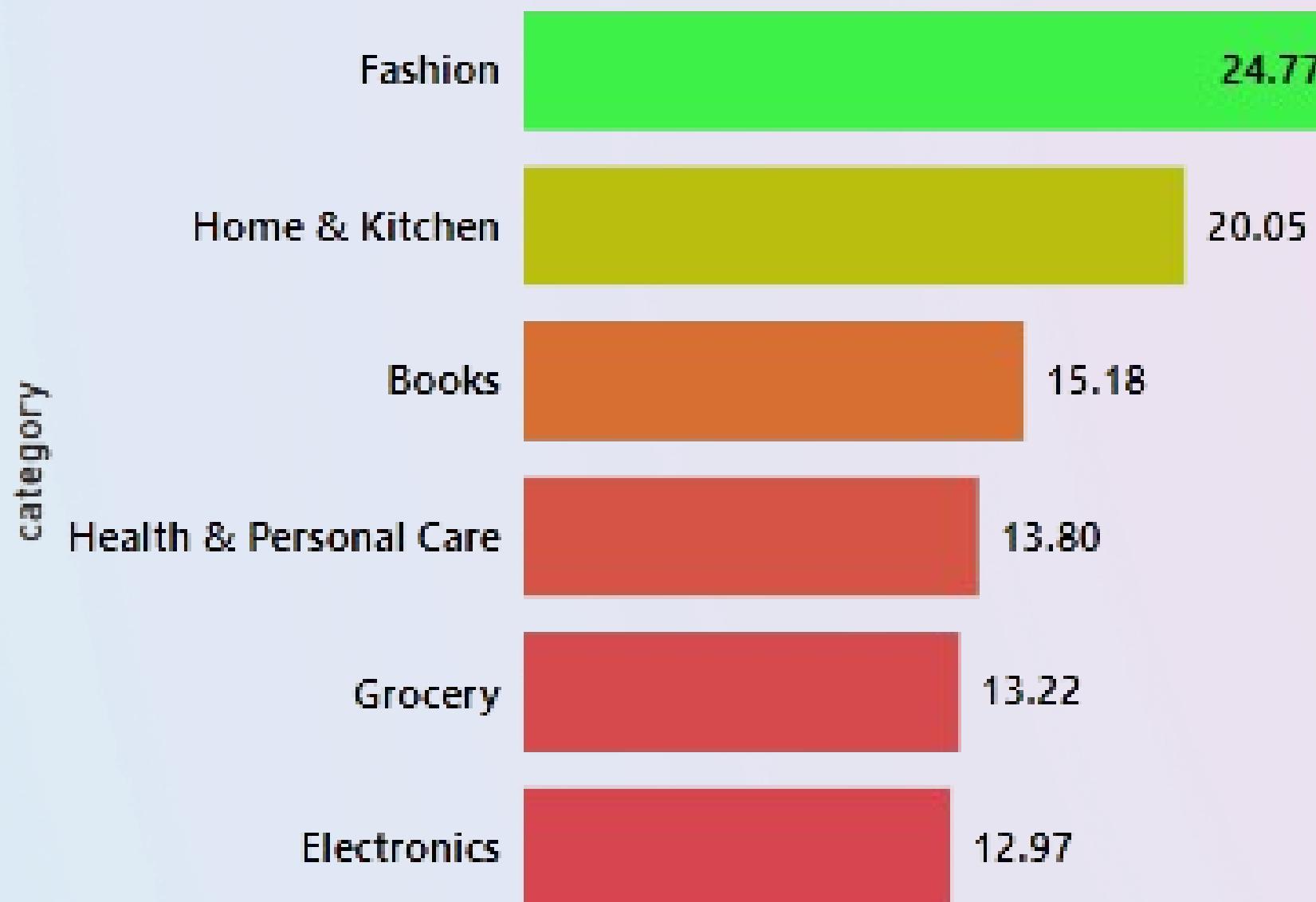
# Product Category wise Revenue Trend

- **Fashion** is a strong-performing category and likely a major revenue driver.
- Some categories exhibit significant seasonal variations. **Home & Kitchen** and **Health & Personal Care** had **high sales in April and May but dropped in June.**





# Product Category-wise Revenue Contribution

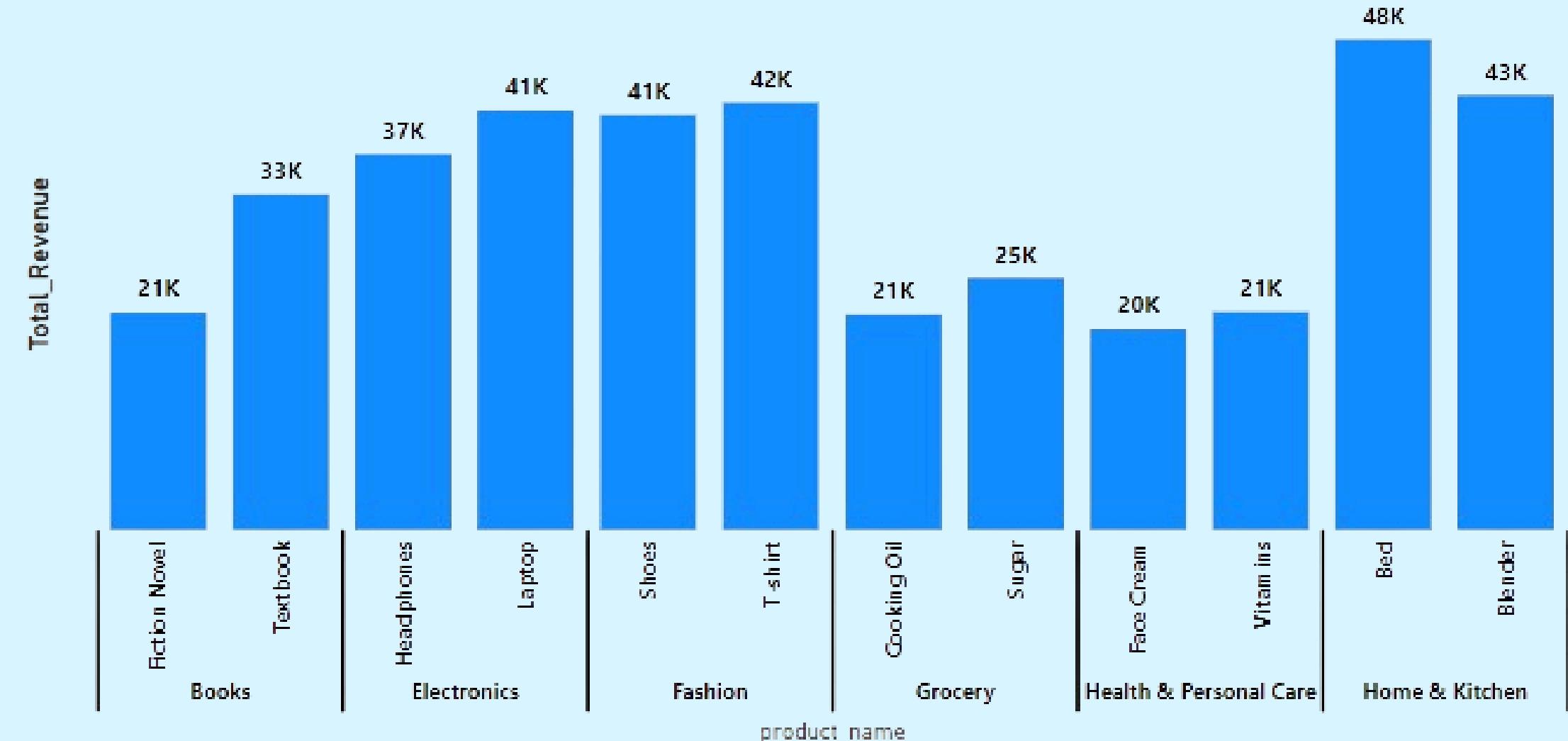


- **Fashion** contributes **24.77%** of the total sales. This indicates that **Fashion** is the most significant revenue driver among all categories.
- The **Home & Kitchen** category also shows a substantial contribution .**This category, along with Fashion, forms a major part of the overall sales.**



# Top 2 Products of Each Category

- The highest sales among individual products are in the Home & Kitchen category with the **Bed** and **Blender**. The Fashion category also shows significant sales with **T-shirts** and **Shoes**





# Monthly Cancellation Percentage

- There is a **decreasing trend** in the percentage of cancelled orders, from **53.63%** in January to **47.77%** in June. This indicates a reduction in the rate of order cancellations, potentially reflecting better inventory management, customer service, or product quality.

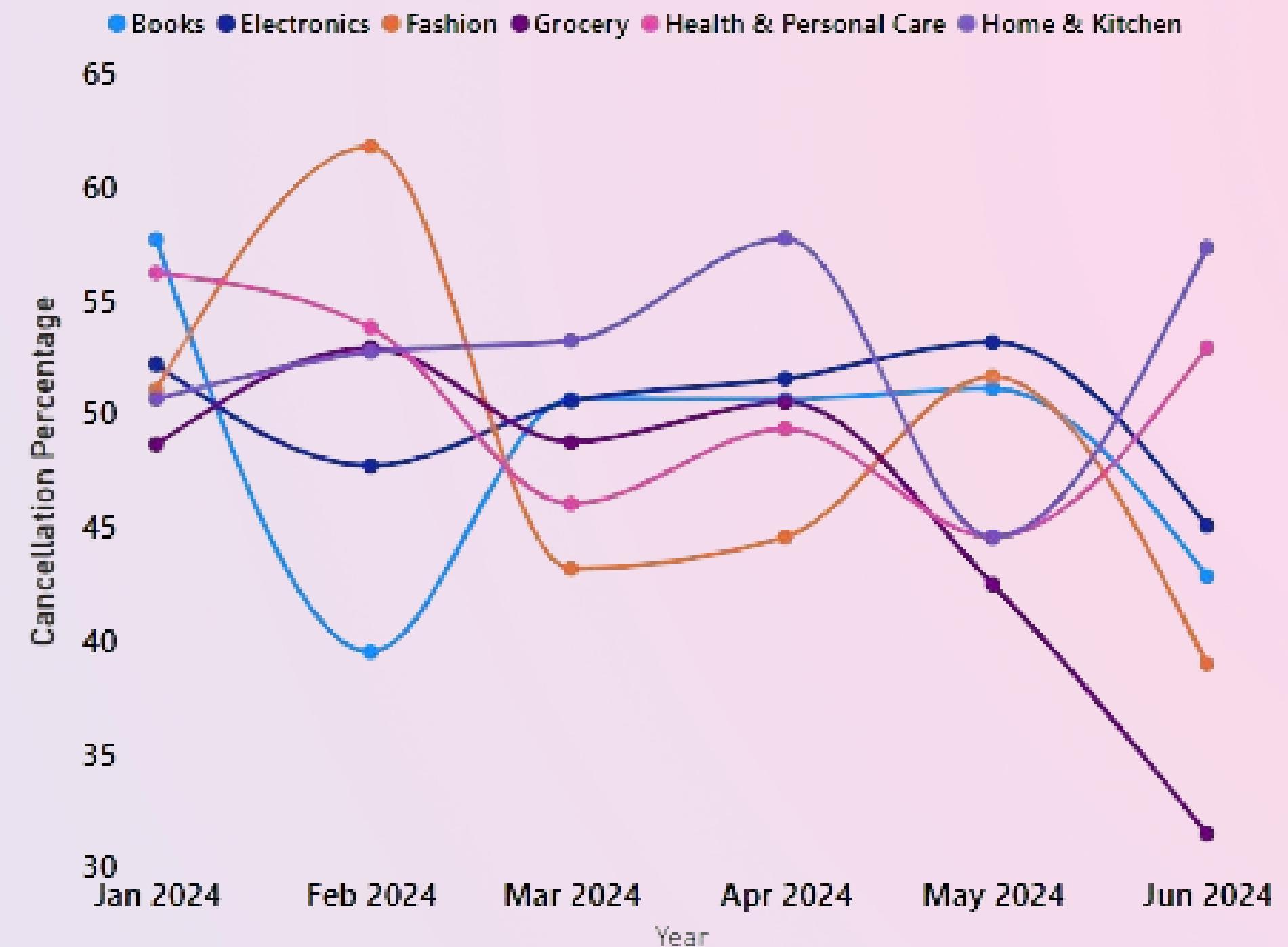




# Product Category wise Cancellation Trend



- **Fashion** items show significant variability in cancellation rates, ranging from **38.98%** to **61.84%**
- **Home & Kitchen** products consistently have **higher cancellation** rates compared to other categories, an average of **52%**
- **Grocery** items generally have **lower cancellation** rates. This stability might be due to necessity-driven purchases or reliable product quality in this category.



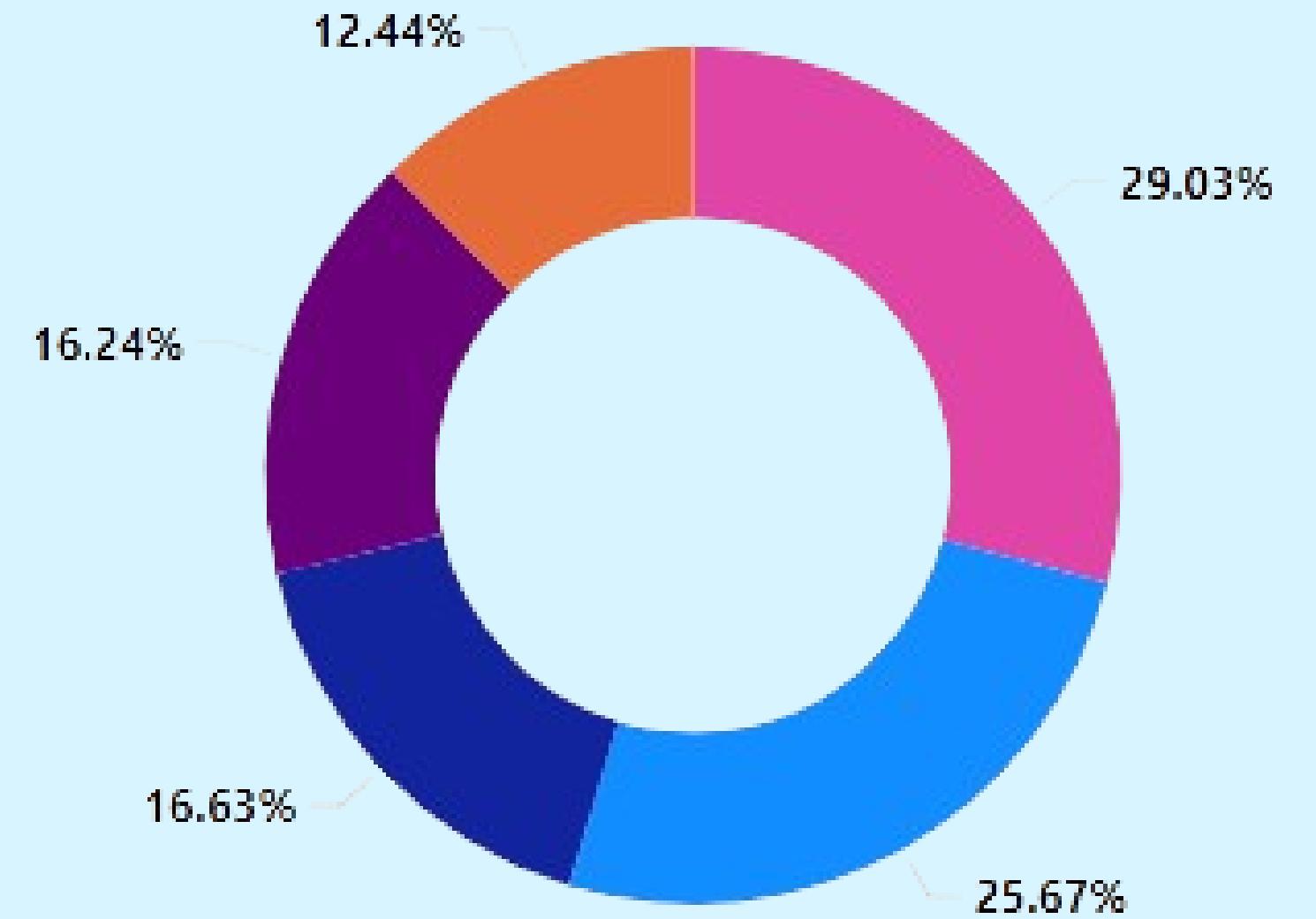
SPECIAL  
OFFER

%

# Offer-wise Revenue Contribution

- **Buy\_two\_get\_one** emerges as the **most effective promotion**, contributing significantly with **29.03%** of total sales.
- Offers like **25%\_discount** and **50%\_off** collectively contribute **42.3%** of sales.
- Consider leveraging the success of **Buy\_two\_get\_one** by extending or creatively modifying similar offers to sustain or boost sales momentum.

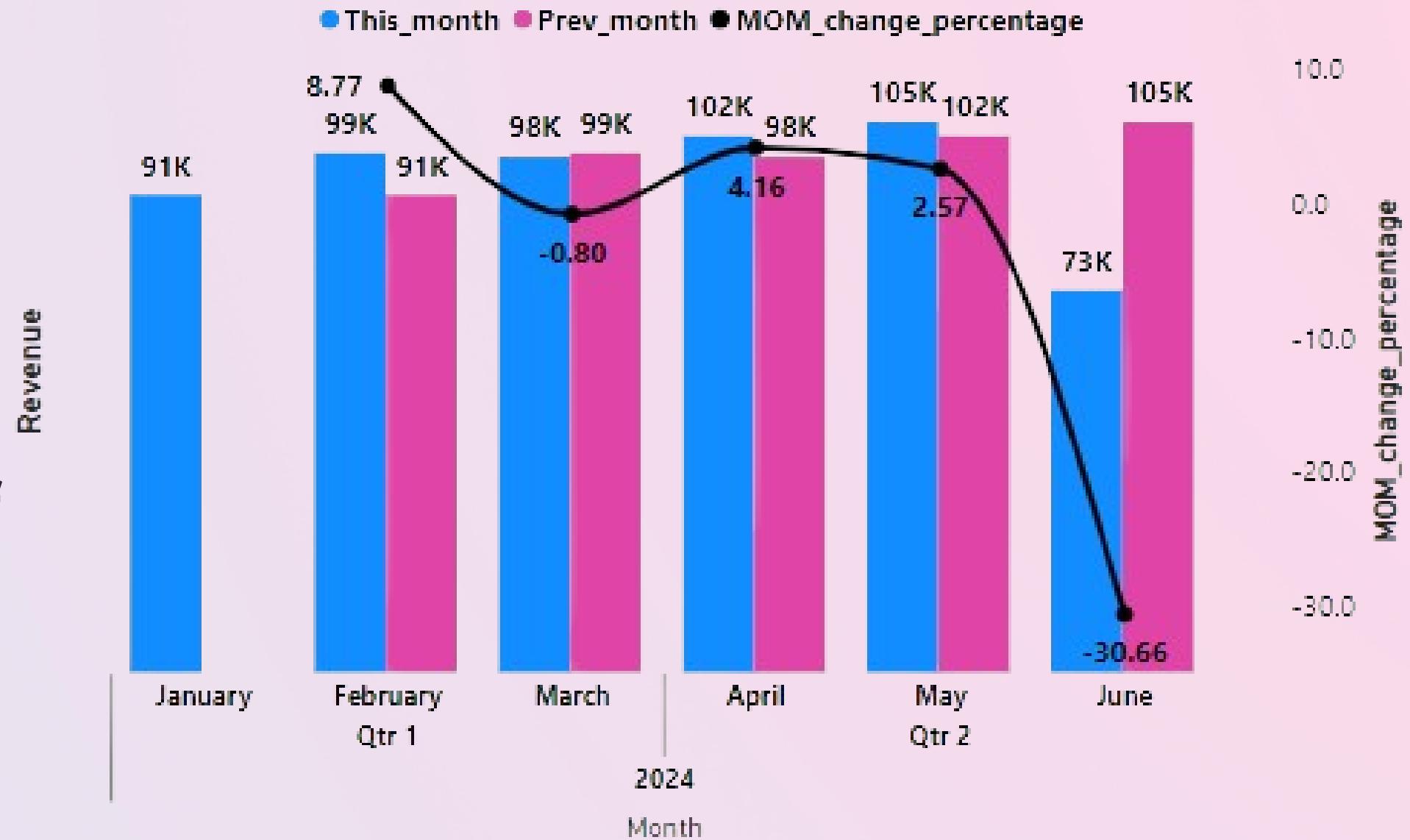
● Buy\_two\_get\_one ● 25%\_discount ● 50%\_off ● Buy\_one\_get\_one\_free ● 500\_off





# Monthly Revenue & MOM Change

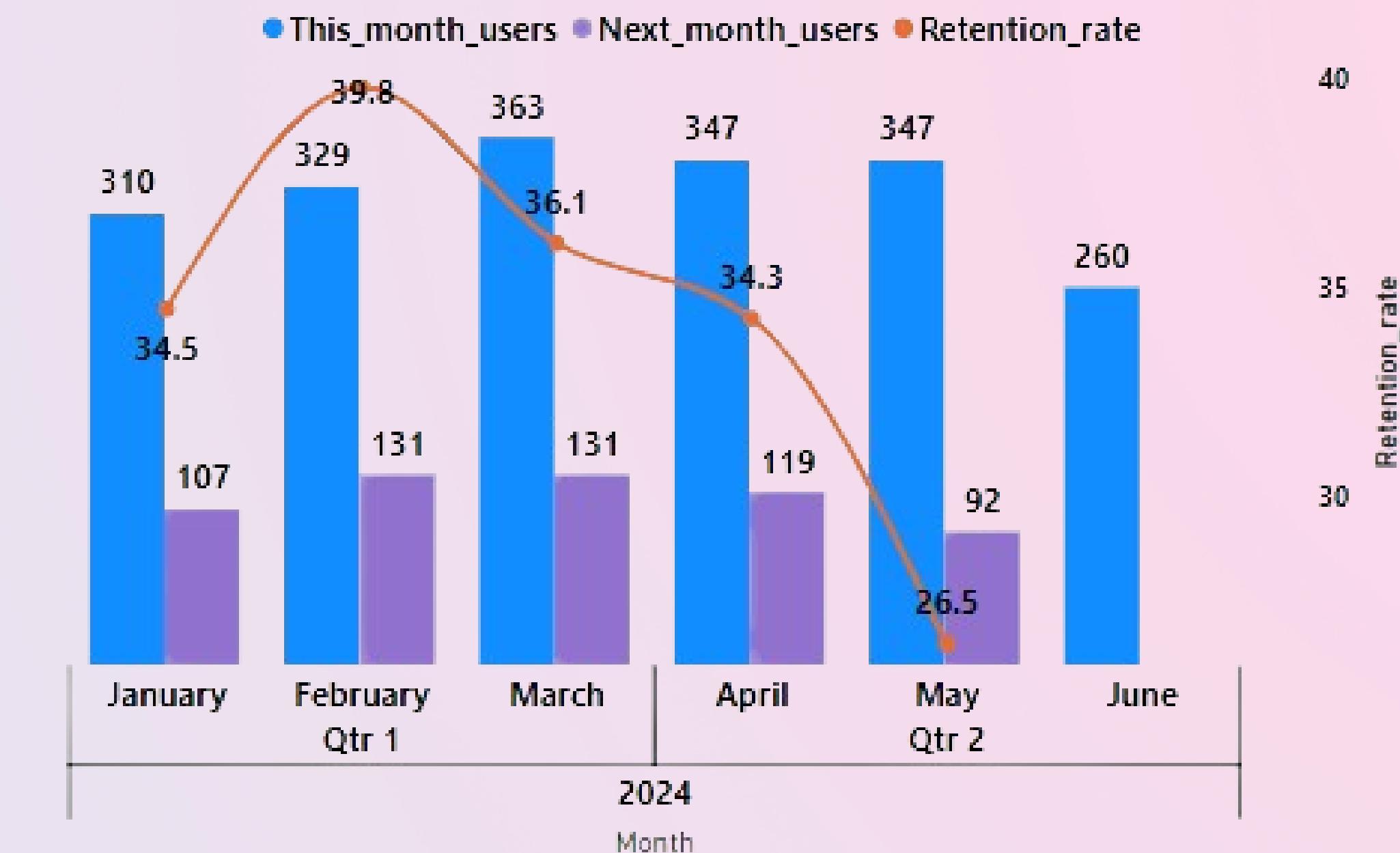
- From **January** to **February** there is a notable increase in sales (**8.77%**). However, the sales **decline** slightly in **March** by **0.8%**
- From **March** to **May** there is steady growth in sales, with increases of **4.16%** in April and **2.57%** in May.
- In **June**, there is a dramatic **decline** in sales by **30.66%** compared to May.





# Monthly User Retention

- Observed a **decline** in retention rates from **January (34.52%)** to **May (26.51%)**, indicating a need for strategies to enhance customer retention and engagement.
- Despite an initial increase in new users from **January (310)** to **March (363)**, there was a notable **drop** by **June (260)**, highlighting potential issues in user acquisition or satisfaction.



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Let us know if you have  
questions or clarifications.