Olist

STORE ANALYSIS

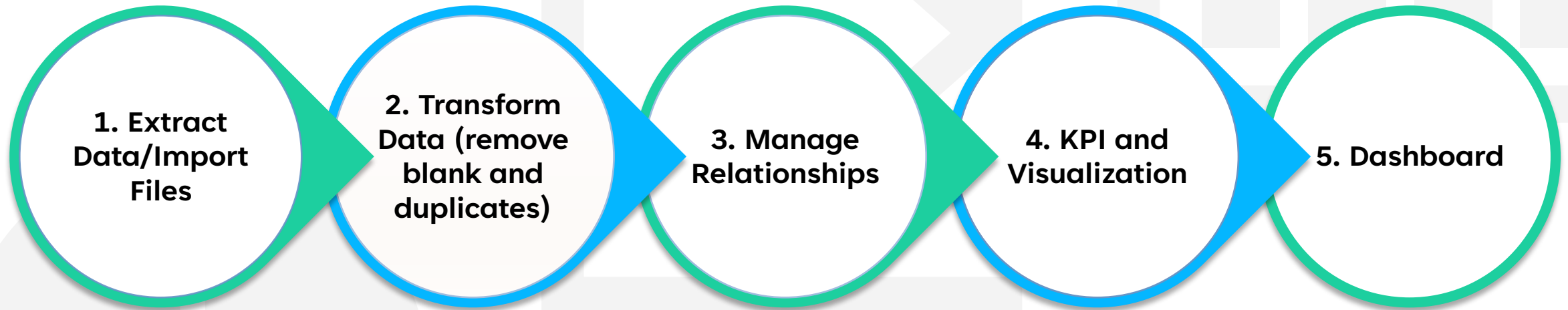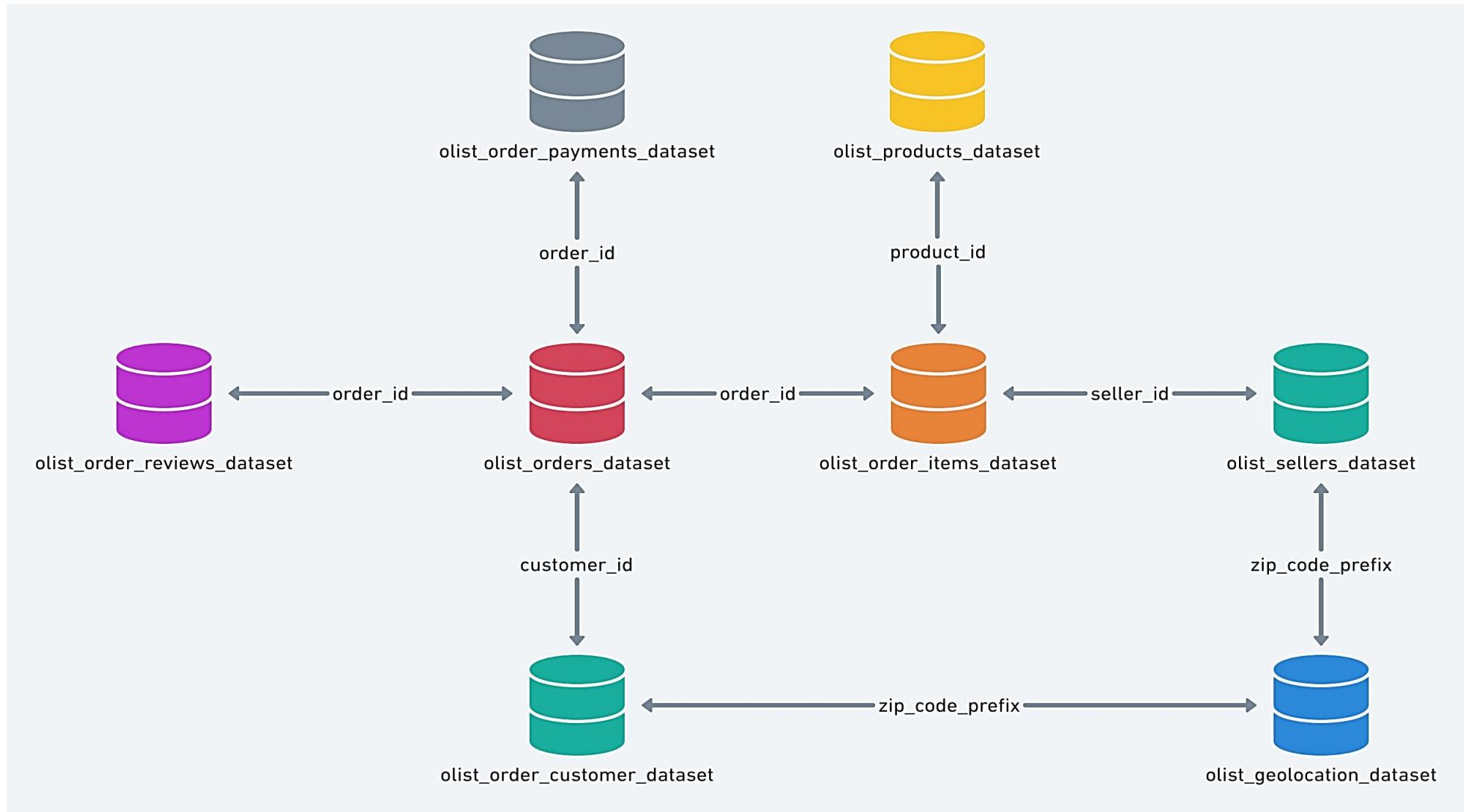# TOOLS USED

Excel

SQL

PowerBI

Tableau

OVER VIEW

The Olist Store Analysis project aims to analyze customer purchasing patterns and payment statistics on an Ecommerce platform, Olist. This project covers several key performance indicators (KPIs) such as weekday vs weekend sales, payment statistics, delivery time, and customer behavior. The analysis is based on nine CSV files, which are cleaned and manipulated to extract valuable insights.
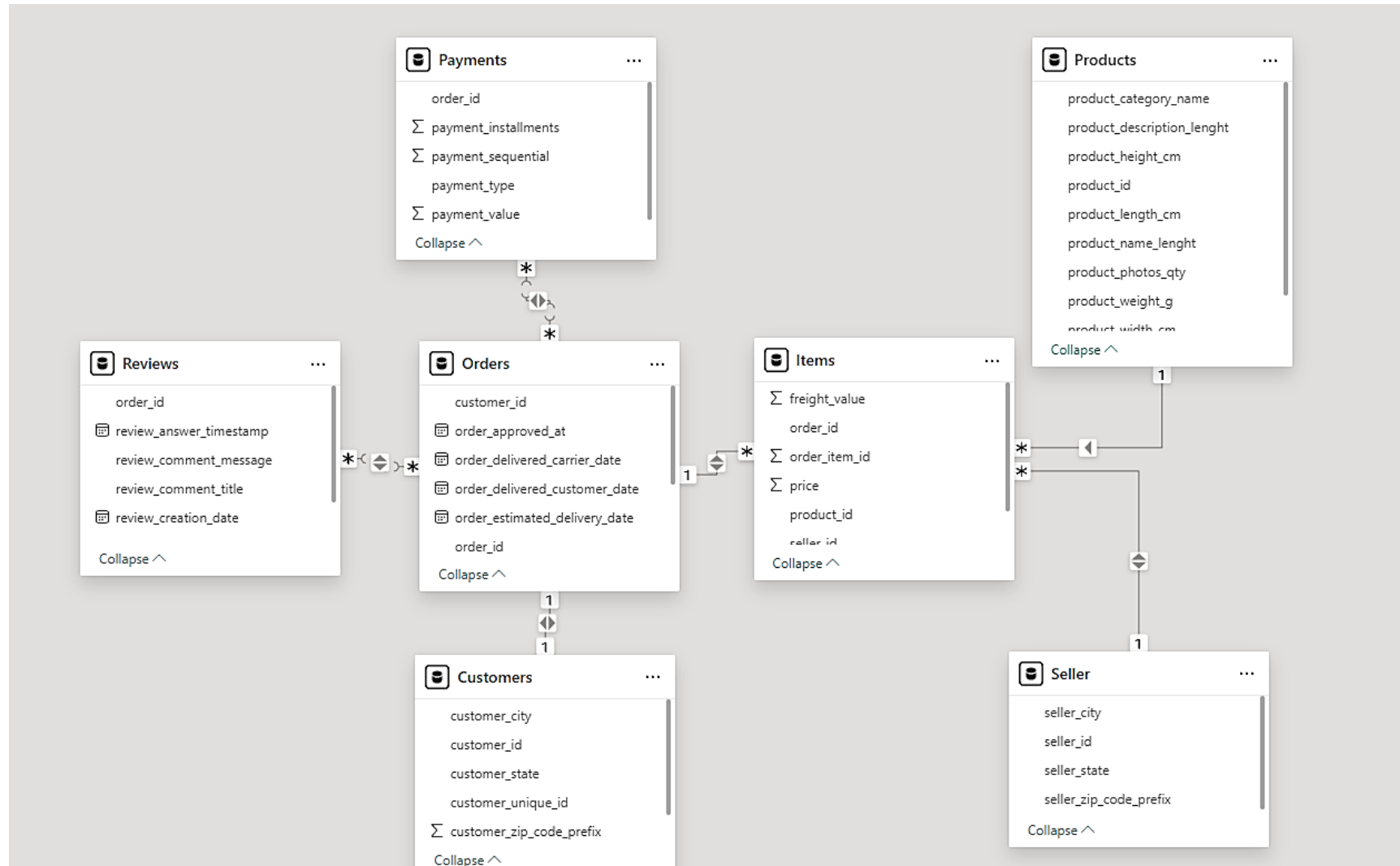
PROJECT WORKFLOW

1. Extract Data/Import Files

2. Transform Data (remove blank and duplicates)

3. Manage Relationships

4. KPI and Visualization

5. Dashboard

JOINS

RELATIONS

KPI's

KPI 01 — Weekday Vs Weekend (order_purchase_timestamp) Payment Statistics

KPI 02 — Number of Orders with review score 5 and payment type as credit card
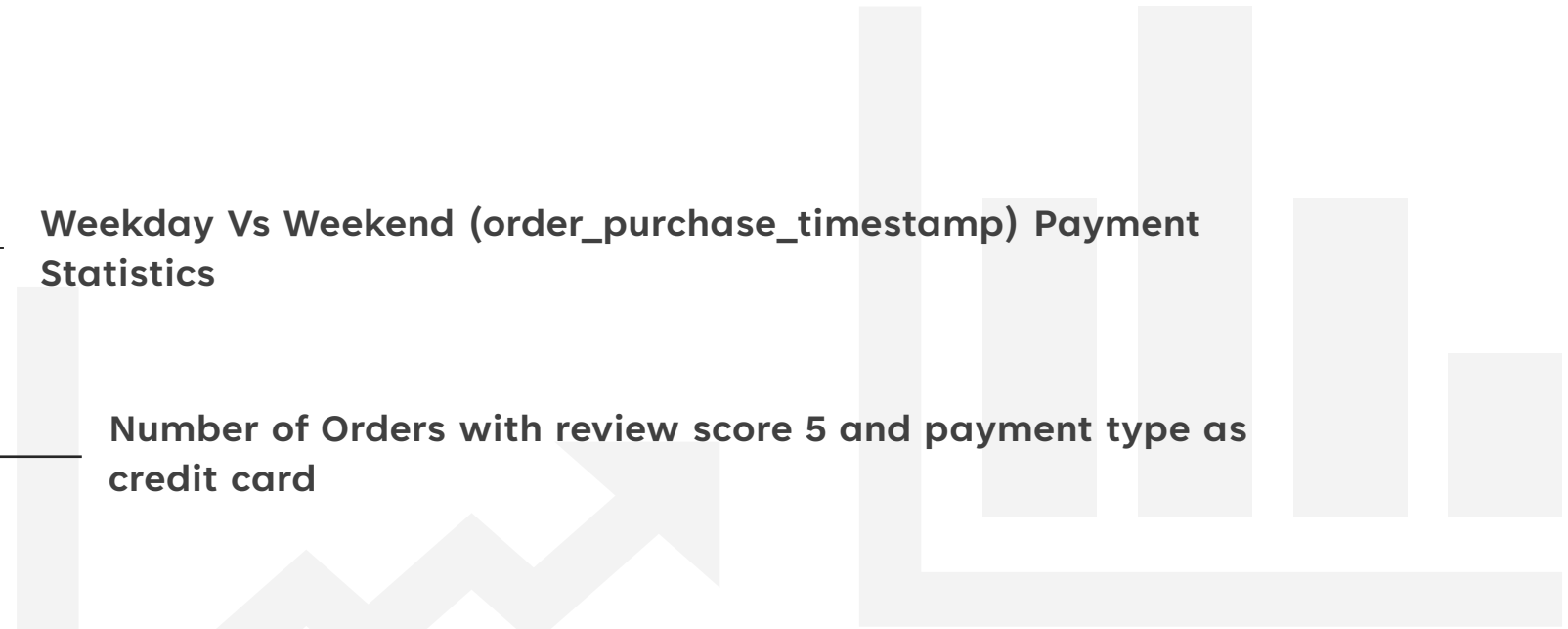
KPI 03 — Average number of days taken for order_delivered_customer_date for pet_shop

KPI 04 — Average price and payment values from customers of Sao Paulo city

KPI 05 — Relationship between shipping days (order_delivered_customer_date - order_purchase_timestamp) Vs review scores.
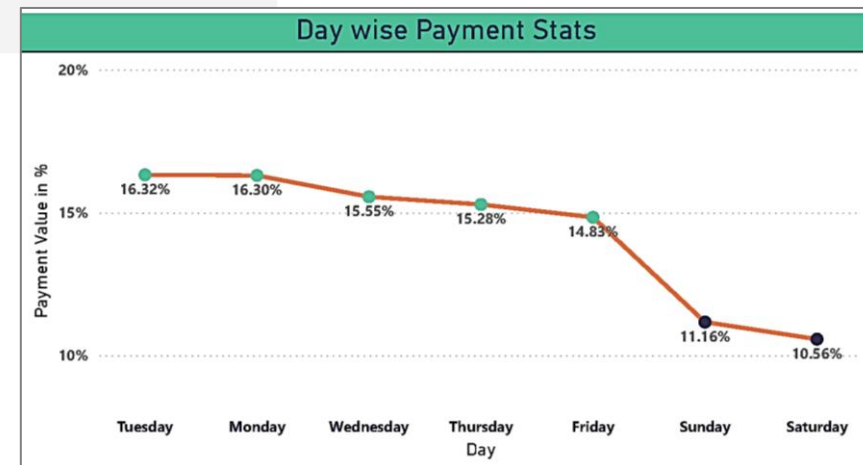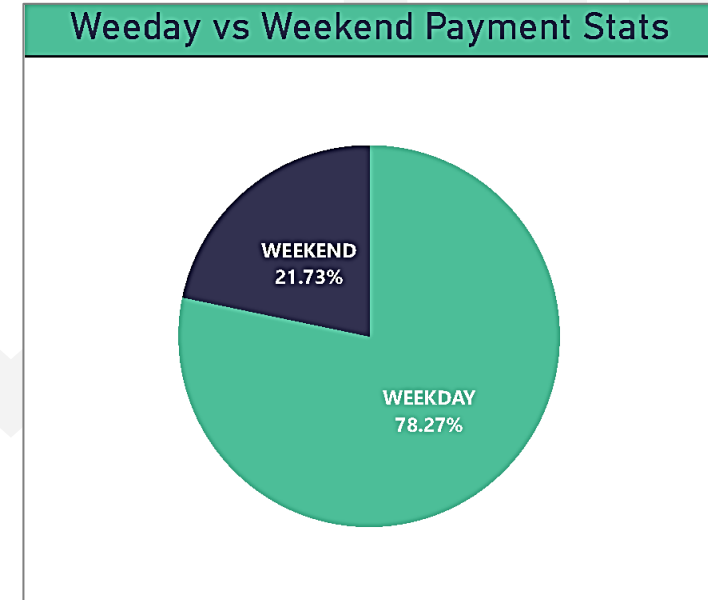
KPI 01

Weekday Vs Weekend (Order_purchase_timestamp) Payment Statistics

This defines the split-up of the sale between the weekdays and weekends.

1. Weekday racks up 78.27% of the total sales

2. Where as the weekend account for 21.73% of the total sales.

3. Even thought weekday takes up 5 days against the weekends with 2 days.

4. The Day wise study, confirms that there Is significant dip in the sales, comparing the Friday and Saturday.
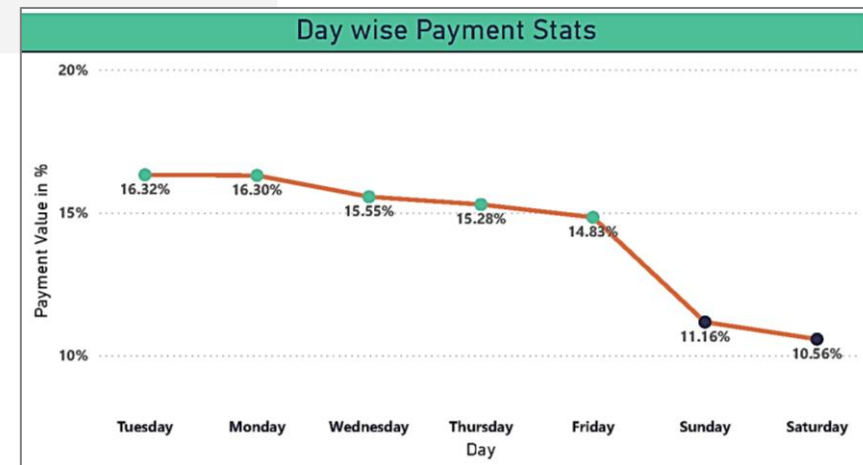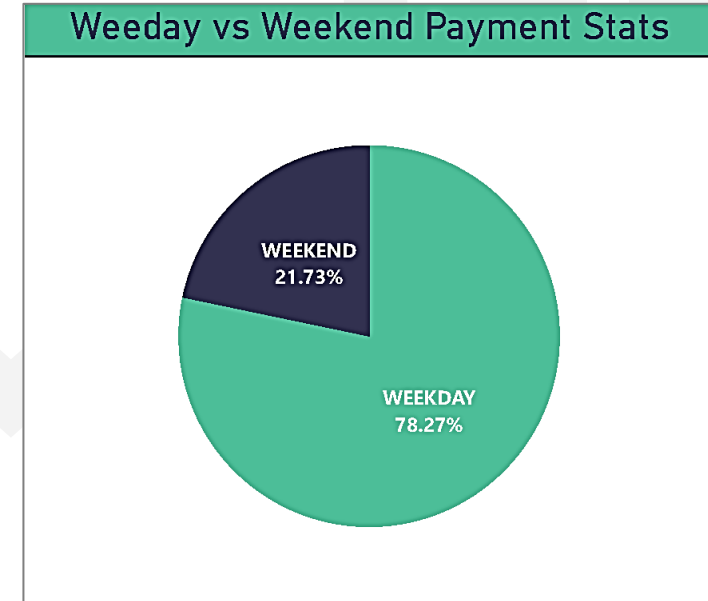

Weeday vs Weekend Payment Stats

WEEKEND 21.73%

WEEKDAY 78.27%

Day wise Payment Stats

Payment Value in %

16.32% 16.30% 15.55% 15.28% 14.83% 11.16% 10.56%

Tuesday Monday Wednesday Thursday Friday Sunday Saturday

Day

KPI 01

Weekday Vs Weekend (Order_purchase_timestamp) Payment Statistics
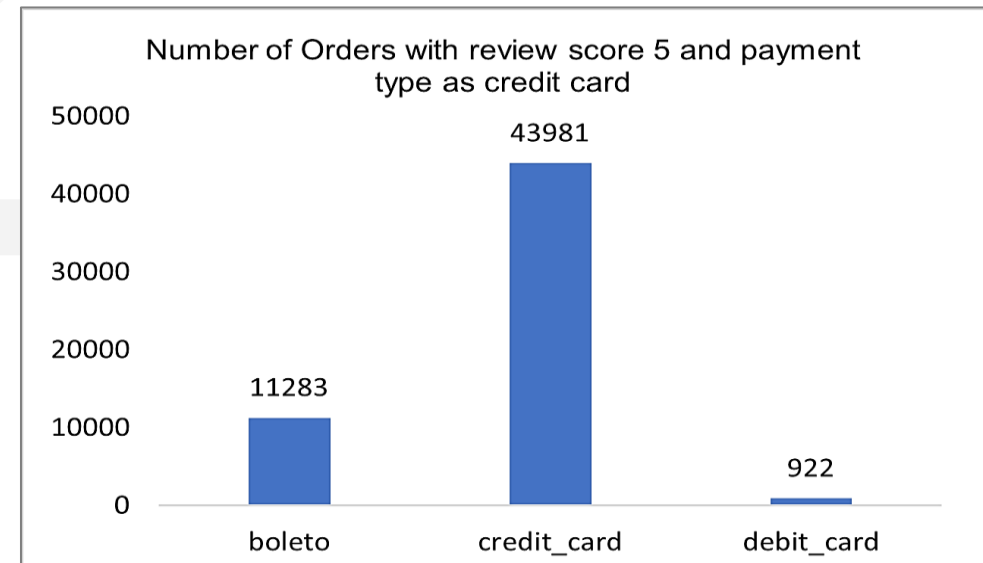
Suggestions to increase the sales

1. Proving discounts and offers during the weekends

2. Issuing of weekend specific coupons to the customers

3. Conducting leisure activities and events like food festival, entertainments around the stores during the weekends

4. Aggressive marketing to promote the above listed ideas.

Weeday vs Weekend Payment Stats

WEEKEND 21.73%

WEEKDAY 78.27%

Day wise Payment Stats

Tuesday 16.32%, Monday 16.30%, Wednesday 15.55%, Thursday 15.28%, Friday 14.83%, Sunday 11.16%, Saturday 10.56%

KPI 02

Number Of Orders With Review Score 5 And Payment Type As Credit Card

- This KPI analyzes the number of orders with a review score of 5 and payment type as credit card. This helps in understanding customer satisfaction levels and payment preferences.

- The total number of orders using credit card is 76,505, amongst which 43,981 are with the review score of 5 which is 57% of the total order.

Payment Type vs Review Score

boleto: 19784, credit_card: 76505, debit_card: 1528

Number of Orders with review score 5 and payment type as credit card

boleto: 11283, credit_card: 43981, debit_card: 922
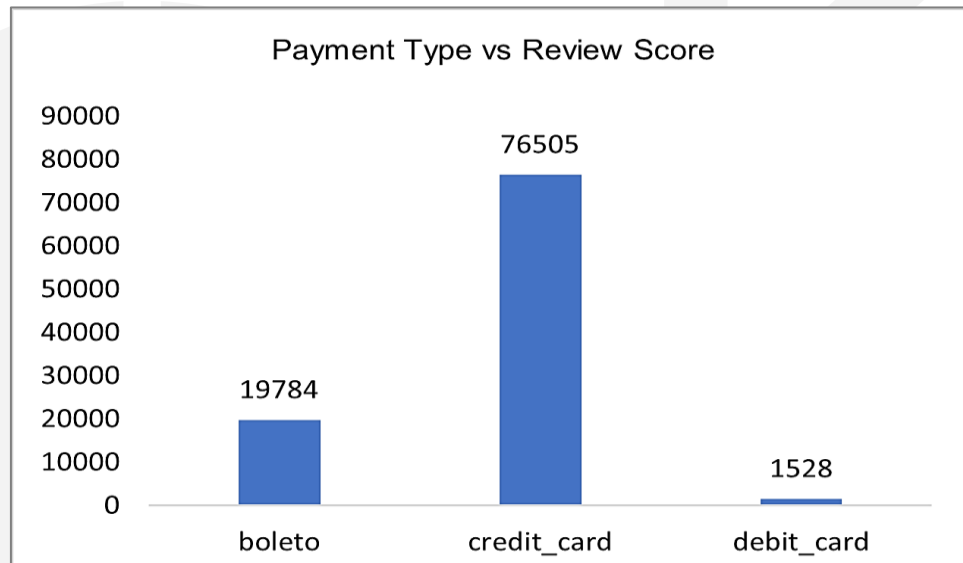
KPI 03

Average Number Of Days Taken For Order_delivered_customer_date For Pet_shop

- **Average Shipping Days**:

   Shipping for the Pet Shop category takes between 11 to 13 days.

- **Significance of Shipping Duration**:

   Timely delivery is critical for customer satisfaction and repeat business.

   Current shipping times exceed the expected duration.

- **Conclusion**

• **Current Performance**:

   • The average shipping time of 11 to 13 days is longer than desirable.

• **Impact**

   • Prolonged shipping times can lead to customer dissatisfaction and potential loss of future sales.

• **Recommendations**:

   • **Streamline Logistics**: Optimize logistics and supply chain processes.
   • **Vendor Management**: Improve collaboration with vendors for quicker dispatch and better inventory management.
   • **Technology Integration**: Implement advanced tracking and automated systems to enhance efficiency.
   • **Customer Communication**: Enhance communication with customers regarding delivery times and provide regular updates.
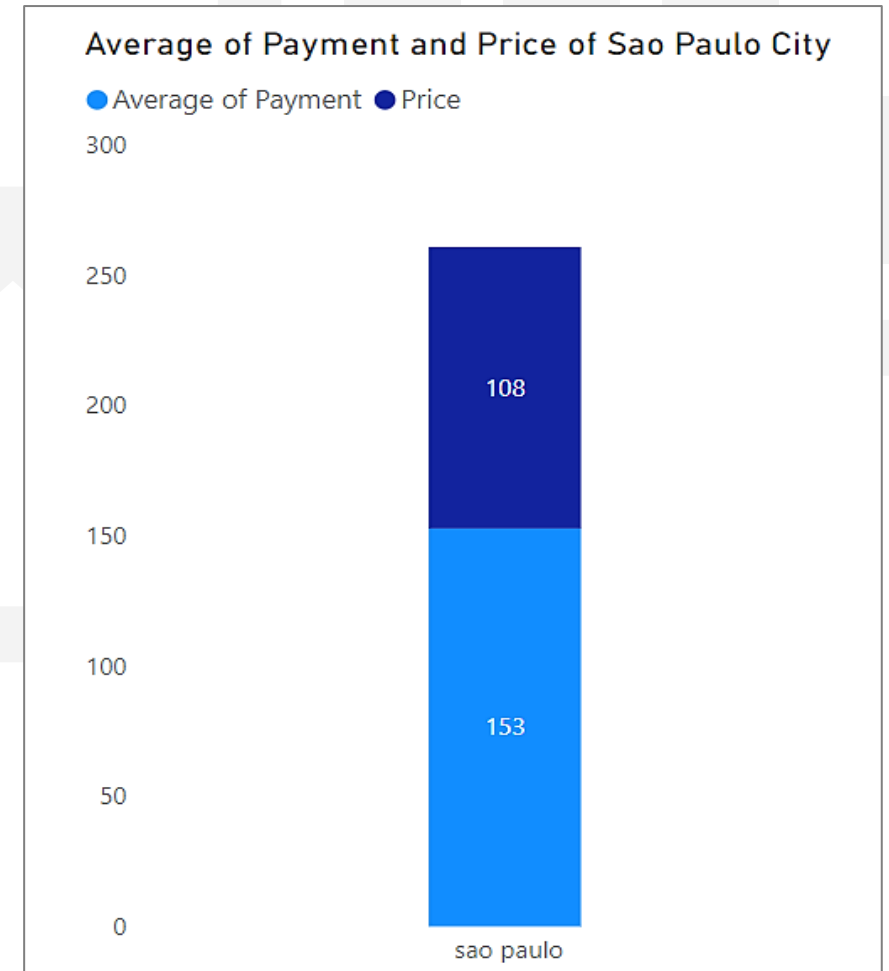
- **Overall conclusion:** Olist Store should focus on reducing shipping days for the Pet Shop category to boost customer satisfaction and drive growth.

Average Shipping Days

olist_products_dataset.pr ...
- audio
- eletrodomesticos_2
- pet_shop
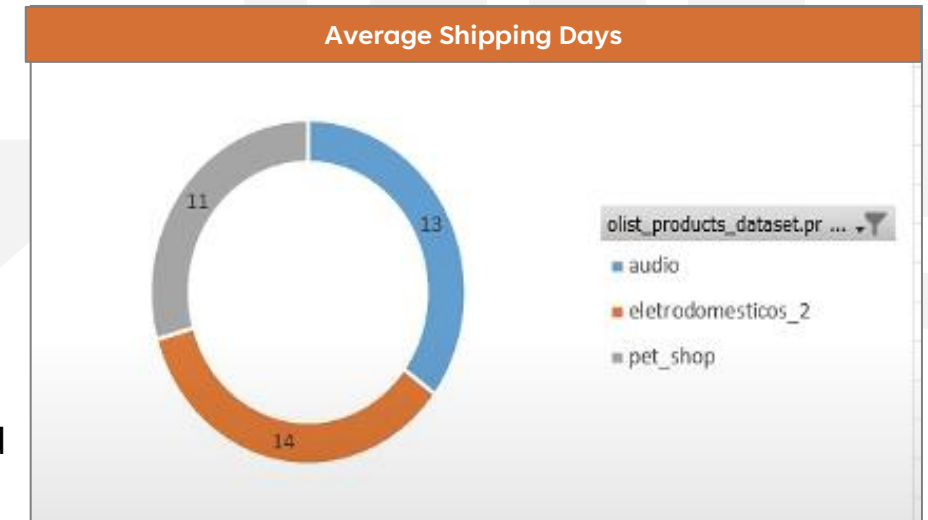
KPI 04
Average Price And Payment Values From Customers Of Sao Paulo City

- According to the analysis the average payment value and price of Sao Paulo city is 154 and 108.

-

  Sao Paulo is the most populous city in the Brazil and consider as global city with impressive statistics so we can advise that this city is profitable city to invest in.

-

  Olist have correctly work on its pricing strategy and need to focus on bringing competitive prices to sustain in long run.

-

  Payment: The customers in Sao Paulo city highly prefer payments by credit card.

-

  Price: In Sao Paulo city the purchase order is higher than other regions

-

  Suggestion: To offer competitive prices that align with customer expectation and market condition in each location.

Average of Payment and Price of Sao Paulo City

● Average of Payment ● Price

300

250

200 108

150

100 153

50

0

sao paulo

Relationship Between Shipping Days (Order_delivered_customer_date - Order_purchase_timestamp) Vs Review Scores

- The chart likely shows that as the number of shipping days increases, the review score tends to decrease. This suggests a negative correlation between shipping days and customer satisfaction (as represented by the review score).

- Review Score 1 (21%): A significant percentage of customers who gave a review score of 1 experienced longer shipping times. This suggests that delayed shipping is a major factor contributing to extremely low satisfaction.

- Review Score 5 (10%): The lowest percentage here indicates that customers who gave the highest review score of 5 likely experienced the shortest shipping times, leading to higher satisfaction.

- **Conclusion:** The chart reinforces the idea that shipping days play a crucial role in customer satisfaction at Olist Superstore. The longer the shipping time, the lower the review scores, reflecting decreased customer satisfaction.

- **Suggestions:**
    - Efficient logistics and timely delivery .
    - Offer same-day or next-day delivery in urban areas where demand is high.
    - Consider expanding or relocating fulfillment centers closer to major customer hubs. This will reduce transit times and ensure quicker delivery to a larger customer base.

Shipping days vs Review score
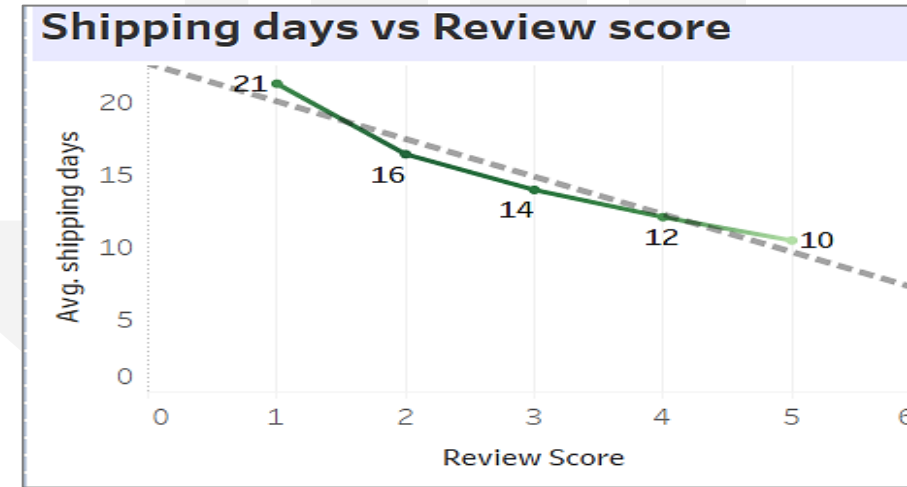
Relationship between shipping days and review score

1	21.31
2	16.65
3	14.26
4	12.31
5	10.68

EXCEL DASHBOARD

Olist Store Performance Analysis

Order_year
- 2016
- 2017
- 2018

Quarter
- Q1
- Q2
- Q3
- Q4

Weekday/Weekend Payment Statistics

22% Weekend

78% Weekday

■ Weekday ■ Weekend
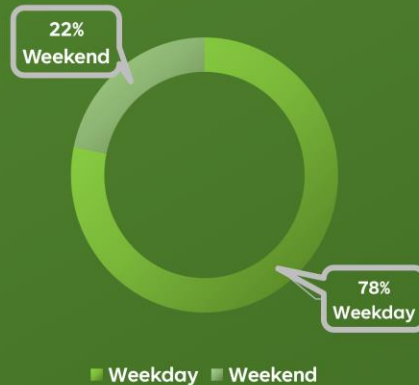
Credit Card Orders with Review score of 5

43856

Avg Delivery Days for Pet Shop Orders
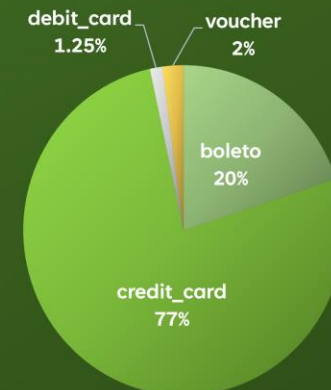
11.21

Avg Price & Payment of sao Paulo Customers

180.00	
160.00	
140.00	
120.00	
100.00	
80.00	
60.00	
40.00	
20.00	
0.00	

107.94   153.75

■ Avg price ■ Avg Payment Value

Avg Delivery Days vs Review Score

- 22.00
- 20.00   19.54
- 18.00
- 16.00   15.84
- 14.00   14.00
- 12.00   12.22
- 10.00   10.65
- 8.00

AVG DELIVERY DAYS

REVIEW SCORE

1 2 3 4 5

Top Performing Product Categories

PRODUCT CATEGORY	PRODUCT VALUE
utilidades_domesticas	6735
pcs	6729
artes	6499
eletroportateis	4799
instrumentos_musicais	4399.87

0 1000 2000 3000 4000 5000 6000 7000 8000

Preferable Mode of Payment

debit_card 1.25%

voucher 2%

boleto 20%

credit_card 77%

POWR BI DASHBOARD

Clear all slicers

Olist

Sales Performance Analysis

Year
2016 | 2017 | 2018

Quarter
Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4

Credit Orders with 5 Score	Avg of Ship days for Pet Shop
6443	**10.63**

Weekday vs Weekend Payment Value

WEEKEND 22.25%
WEEKDAY 77.75%
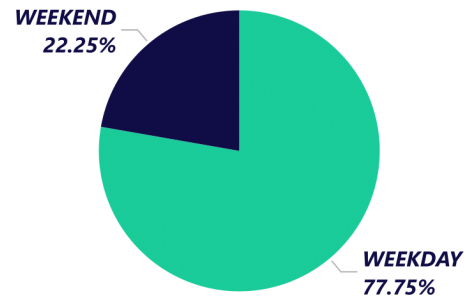
Sao Paulo Cust Avg Price & Payment value

● Avg Price ● Avg Payment Value

105 | 173

Month wise performance of Top5 Cities

Customer City ● belo horizonte ● brasilia ● campinas ● rio de janeiro ● sao paulo

Price

200K
150K
100K
50K
0K

July: 64K, 46K
August: 70K, 45K
September: 81K, 55K, 12K

Month
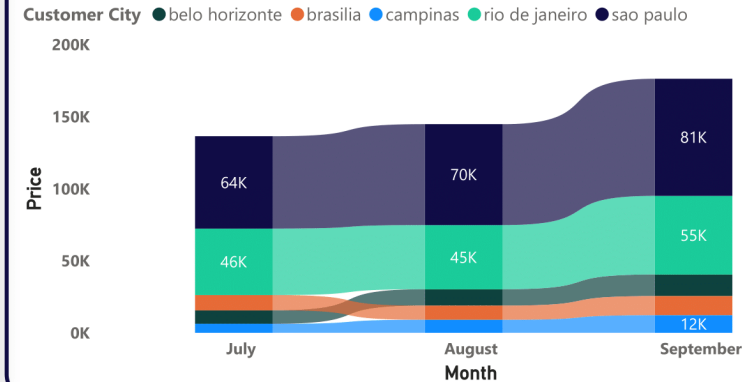
Order count of Top 5 Sellers

7a67c85e85bb2ce8582c35... 15.99%
cc419e0650a3c5ba771... 26.86%
1f50f9201... 17.09%
6560211a19b47992c3666c... 17.28%
4a3ca9315b744ce9f8e9... 22.78%
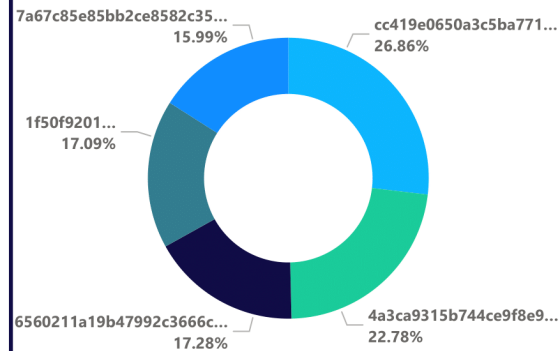
State wise Sales Distribution

100%

SP	601.84K
RJ	252.33K
MG	187.59K
RS	100.84K
PR	75.71K

12.6%
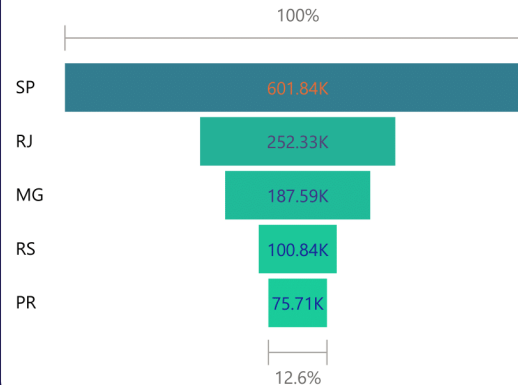
Impact of Shipping days on Review Rating

16
15.14
14
12.40
12
11.44
10
9.94
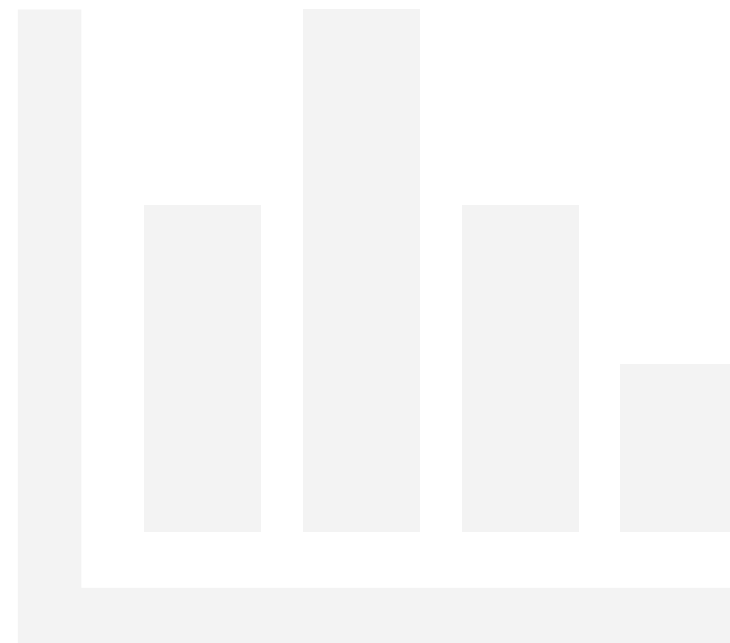8
8.93

Average of Ship_days

Review Rating: 1, 2, 3, 4, 5

TABLEAU DASHBOARD

CONCLUSION

The Olist Store Analysis project provides valuable insights into customer behavior and payment statistics. The analysis of these KPIs helps Olist in identifying areas of improvement and creating targeted marketing campaigns. As a data analyst, I have used Excel and Power BI to clean and manipulate the dataset and create meaningful visualizations. This project serves as a great example of how data analysis can help businesses make informed decisions.

THANK YOU