

# OLIST STORE DATA ANALYSIS

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# DATA SETS

- There are totally 09 data sets were provided by the Olist company to answer their business questions.

## ① ORDERS

This table contains the details of each unique orders. (purchase/delivery dates & order status)

## ② REVIEWS

It contains the reviews given by the customer for the products they purchased.

## ③ PAYMENTS

This dataset showcase the payments made by the customers for their orders.

## ④ CUSTOMERS

This dataset contains the details of all its customers.

## ⑤ ORDER ITEMS

It gives us the details of price and freight value of each product with respect to the all the orders.

## ⑥ PRODUCTS

This dataset holds the details of all its products from all the categories.

## ⑦ SELLERS

It contains the informations of sellers who are selling their products across different locations.

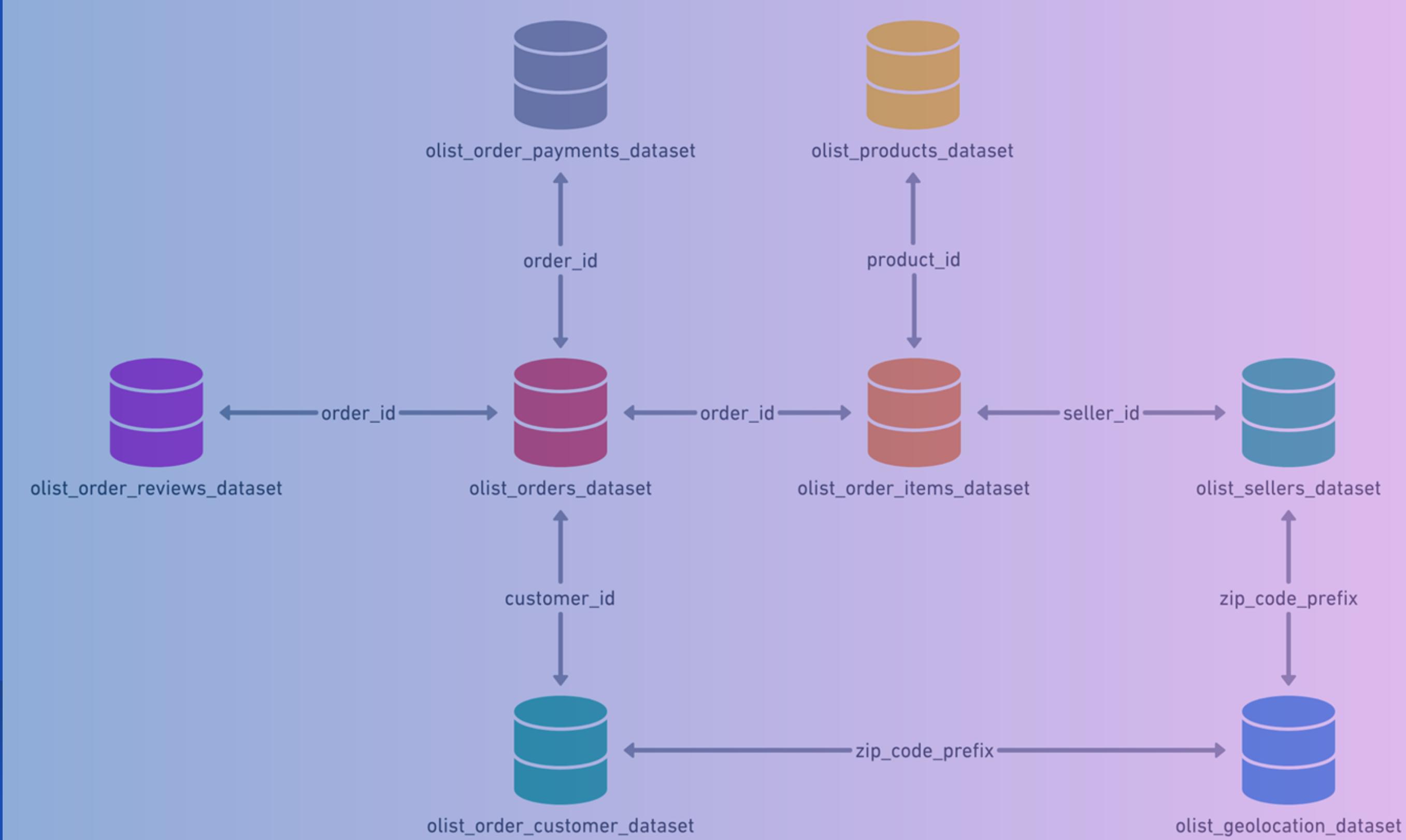
## ⑧ GEO LOCATION

It provides the geographical information related to both the sellers and customers.

## ⑨ PRODUCT CATEGORY TRANSLATION

This dataset provides the translated name for each products in English.

# DATA SET RELATIONSHIP



# KPI's

- Weekday Vs Weekend (order\_purchase\_timestamp) Payment Statistics
- Number of Orders with review score 5 and payment type as credit card
- Average number of days taken for order\_delivered\_customer\_date for pet\_shop
- Average price and payment values from customers of sao paulo city
- Relationship between shipping days (order\_delivered\_customer\_date - order\_purchase\_timestamp) Vs review scores



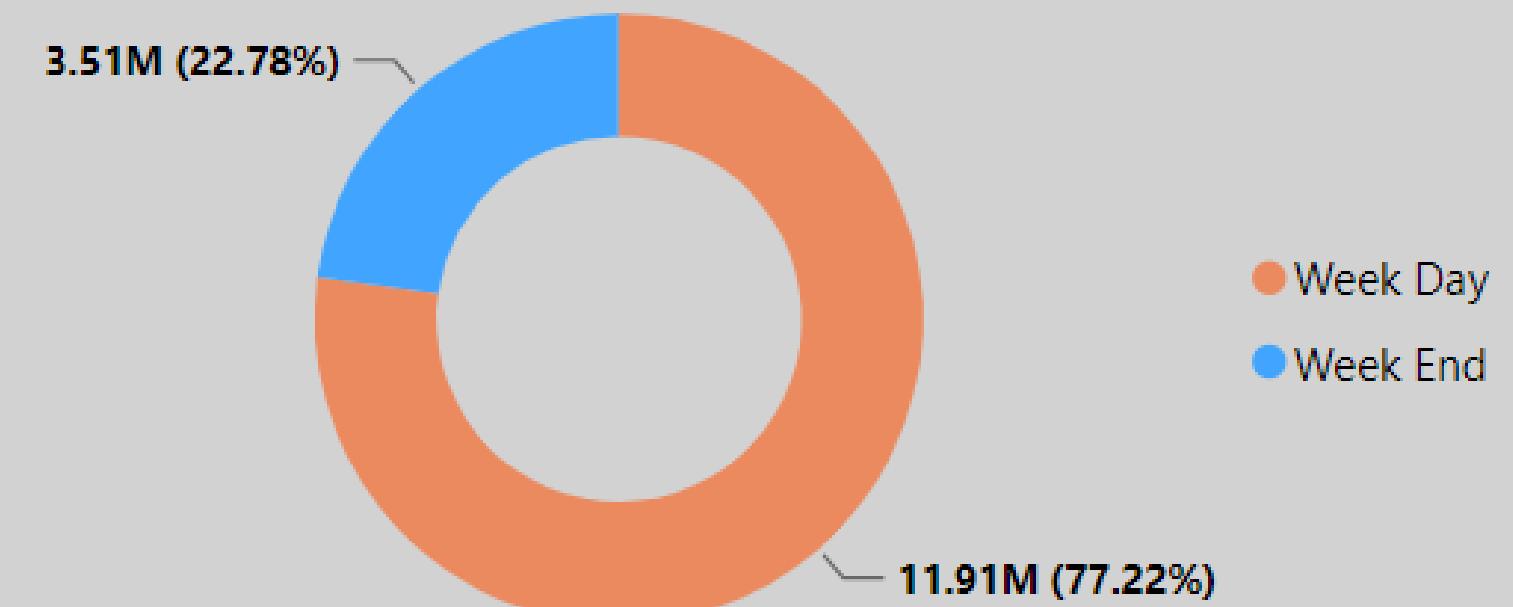
## KPI 1

### WEEKDAY VS WEEKEND (ORDER\_PURCHASE\_TIMESTAMP) PAYMENT STATISTICS

#### INSIGHT:-

- After analysing the orders & payments data sets, we derived the answer for first KPI which shows the majority of sales were done on week days (78% of total payments) that refers, the customers are buying products mostly on week days only.
- This will help the company to concentrate on week end sales and plan accordingly.

#### Payment Statistics



## KPI 2

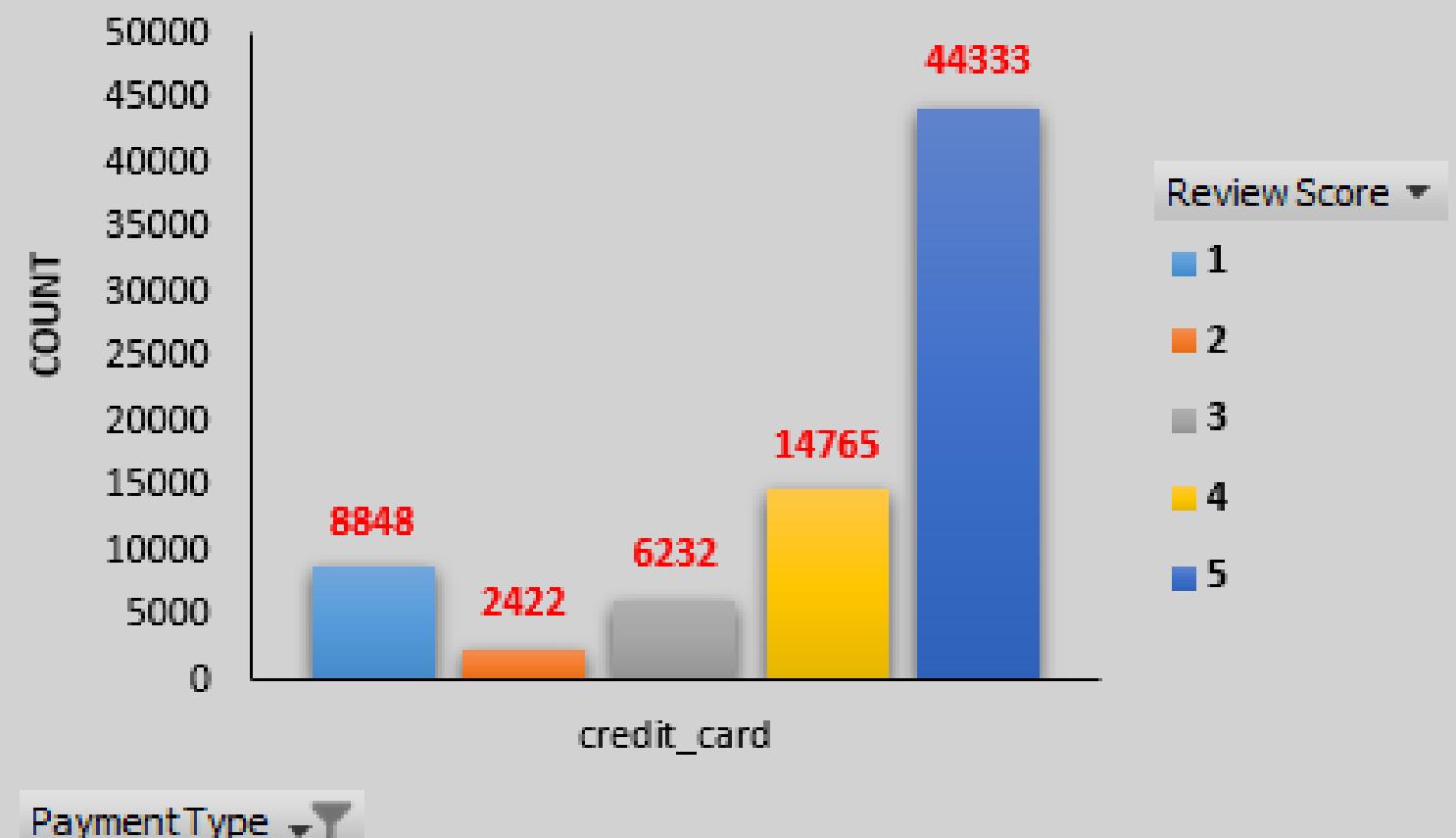
## NUMBER OF ORDERS WITH REVIEW SCORE 5 AND PAYMENT TYPE AS CREDIT CARD

### INSIGHT:-

- From the analysis of second KPI we could see that out of 98K+ orders, 44.3K orders have been made with credit card which has the review score '5'.
- It is clearly visible that about 75% of their total customers are purchasing through credit cards, in that only 45% customers gave the review score '5'.

No. of Orders

Count of Orders



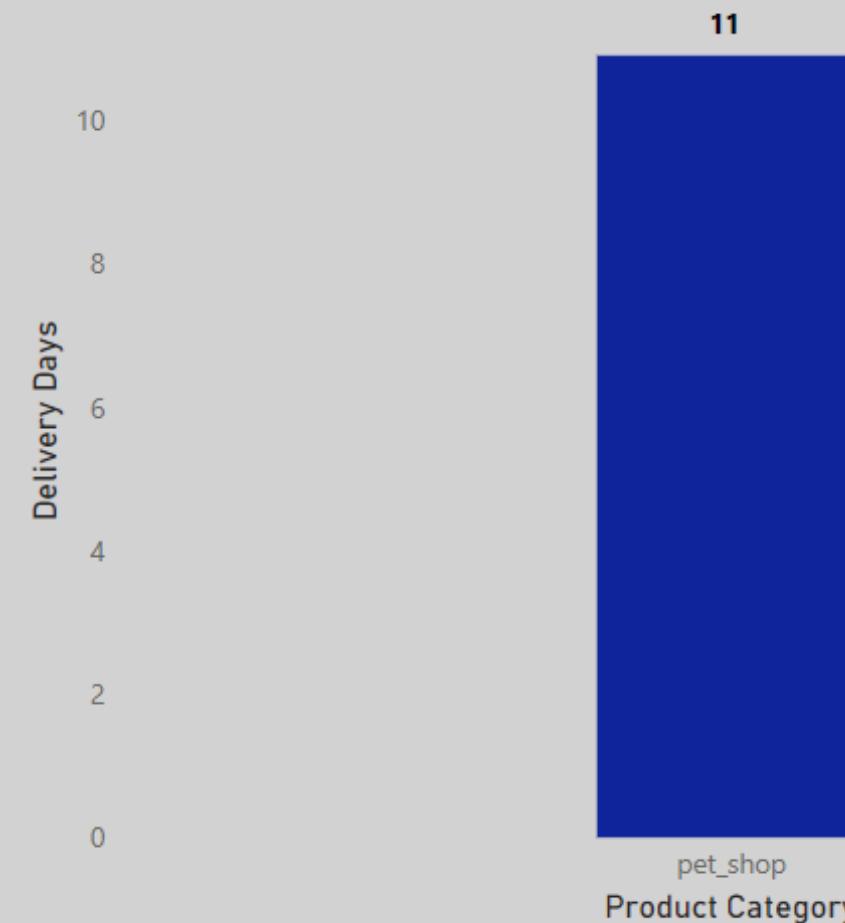
## KPI 3

### AVERAGE NUMBER OF DAYS TAKEN FOR ORDER\_DELIVERED\_CUSTOMER\_DATE FOR PET\_SHOP

#### INSIGHT:-

- This KPI shows that the average days taken for delivering the products of pet shop is '11'.
- Since the delivery days is quite a long time, the company may focus to increase the delivery methods so that the no. of days taken will get reduce.

*Average of Delivery Days*



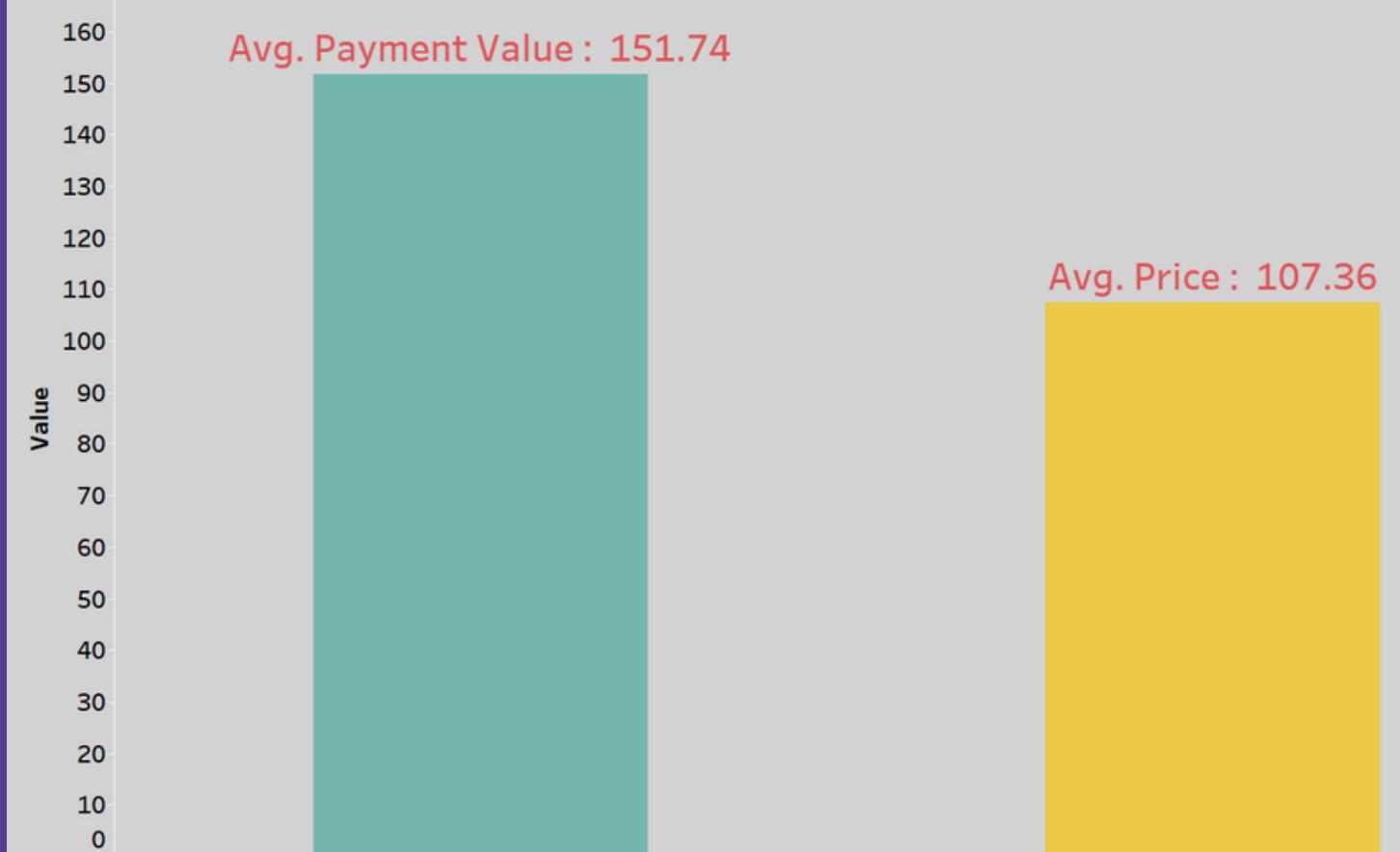
## KPI 4

## AVERAGE PRICE AND PAYMENT VALUES FROM CUSTOMERS OF SAO PAULO CITY

### INSIGHT:-

- Sao Paulo city is the most populous city in Brazil.
- The average payment and price value in this city is 151.74 & 107.36 respectively.
- This KPI helps in understanding the spending patterns of the customers in this region, identifying the high value customers and creating any marketing campaigns.

*Average of Payment & Price Value*



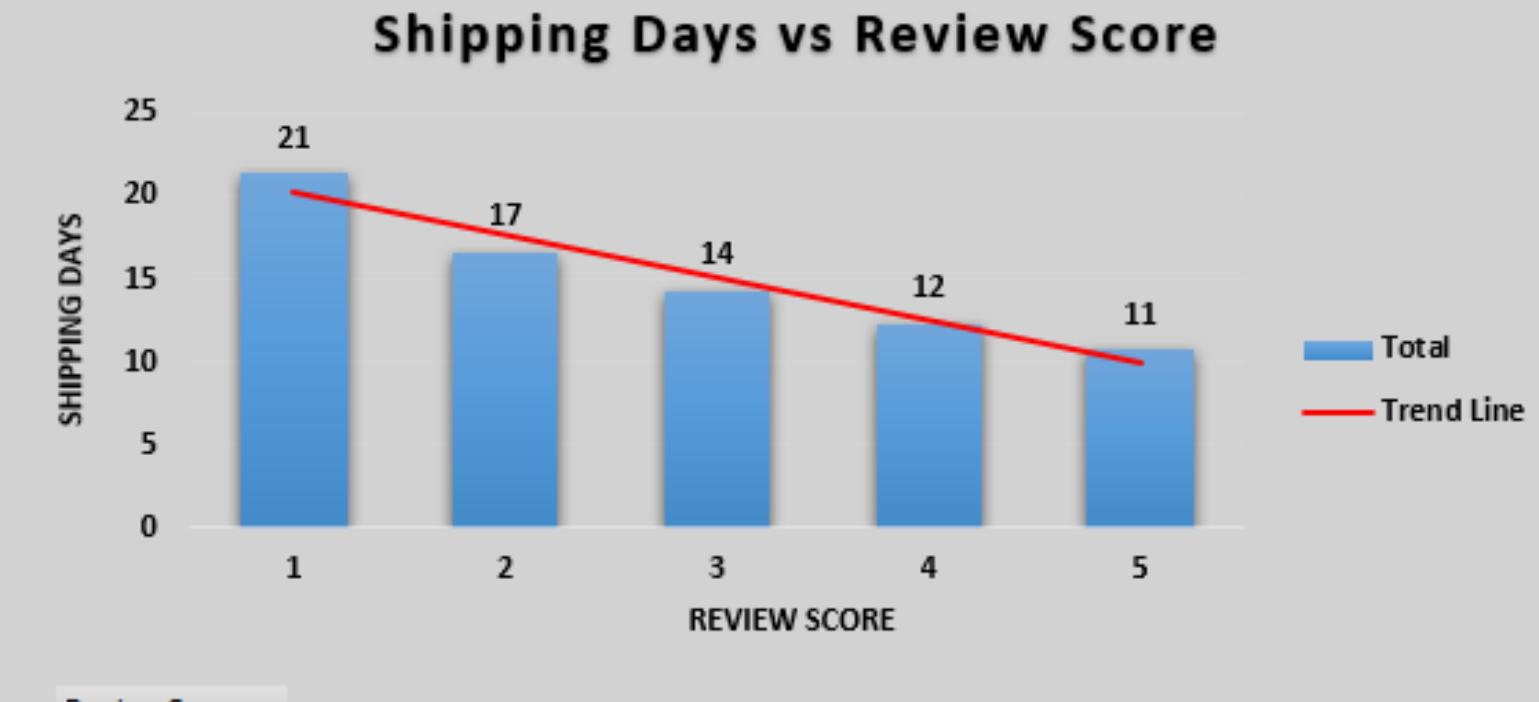
## KPI 5

# RELATIONSHIP BETWEEN SHIPPING DAYS (ORDER\_DELIVERED\_CUSTOMER\_DATE - ORDER\_PURCHASE\_TIMESTAMP) VS REVIEW SCORES

### INSIGHT:-

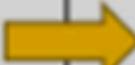
- We could see that less days of shipping has the highest review score where as the more no. of days has the lowest score.
- If the products are delivered to the customers within less no. of days, the customer satisfaction is improved that leads to the positive reviews for the company.

Average of Shipping Days



# MY SQL QUERIES

```
• select case when weekday(order_purchase_timestamp) in (5,6) then "WeekEnd"  
else "WeekDay" end as "Week_Day_End", concat(round((sum(payments.payment_value)/1000000),2), " M") as TotalPayment from olist_orders_dataset6 as orders  
inner join olist_order_payments_dataset4 as payments  
on orders.order_id = payments.order_id group by Week_Day_End;
```



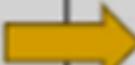
Week_Day_End	TotalPayment
WeekDay	11.91M
WeekEnd	3.51M

```
• select count(*) as "Orders Count" from olist_order_payments_dataset4 inner join olist_order_reviews_dataset5 on  
olist_order_payments_dataset4.order_id = olist_order_reviews_dataset5.order_id  
where payment_type = "credit_card" and review_score = 5;
```



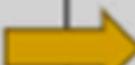
Orders Count
44333

```
• select round(avg(datediff(order_delivered_customer_date, order_purchase_timestamp)),0) as "Avg. Delivery Days" from olist_orders_dataset6  
inner join olist_order_items_dataset3 on olist_orders_dataset6.order_id = olist_order_items_dataset3.order_id  
inner join olist_products_dataset7 on olist_order_items_dataset3.product_id = olist_products_dataset7.product_id  
where olist_products_dataset7.product_category_name = "pet_shop";
```



Avg. Delivery Days
11

```
• select round(avg(olist_order_items_dataset3.price),2) as "Avg Price", round(avg(olist_order_payments_dataset4.payment_value),2) as "Avg Payment"  
from olist_order_items_dataset3 inner join olist_orders_dataset6 on olist_order_items_dataset3.order_id = olist_orders_dataset6.order_id  
inner join olist_order_payments_dataset4 on olist_orders_dataset6.order_id = olist_order_payments_dataset4.order_id inner join olist_customers_dataset1  
on olist_orders_dataset6.customer_id = olist_customers_dataset1.customer_id where olist_customers_dataset1.customer_city = "sao paulo";
```



Avg Price	Avg Payment
107.36	151.74

```
• select olist_order_reviews_dataset5.review_score as "Review Score",  
round(avg(datediff(olist_orders_dataset6.order_delivered_customer_date, olist_orders_dataset6.order_purchase_timestamp)),0)  
as "Avg Shipping Days" from olist_orders_dataset6 inner join olist_order_reviews_dataset5 on  
olist_orders_dataset6.order_id = olist_order_reviews_dataset5.order_id group by olist_order_reviews_dataset5.review_score  
order by olist_order_reviews_dataset5.review_score;
```



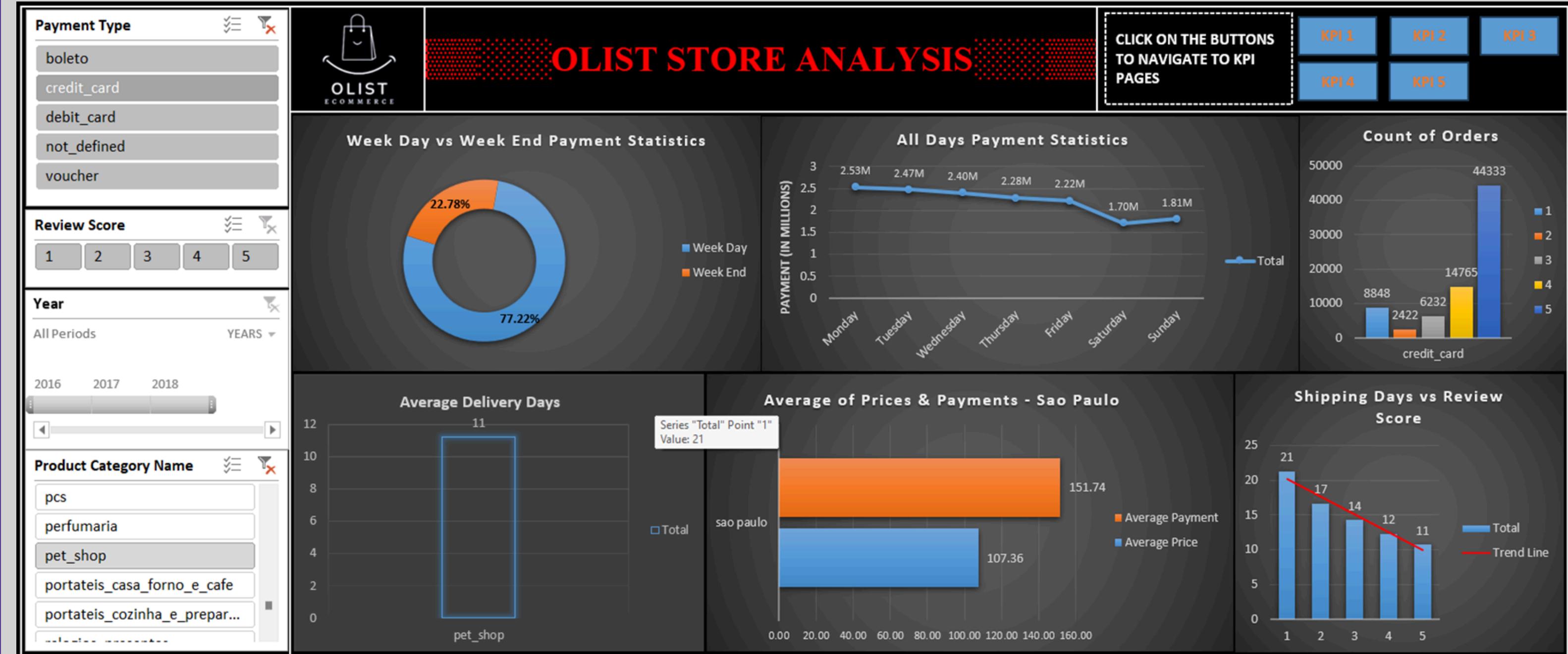
Review Score	Avg Shipping Days
1	21
2	17
3	14
4	12
5	11



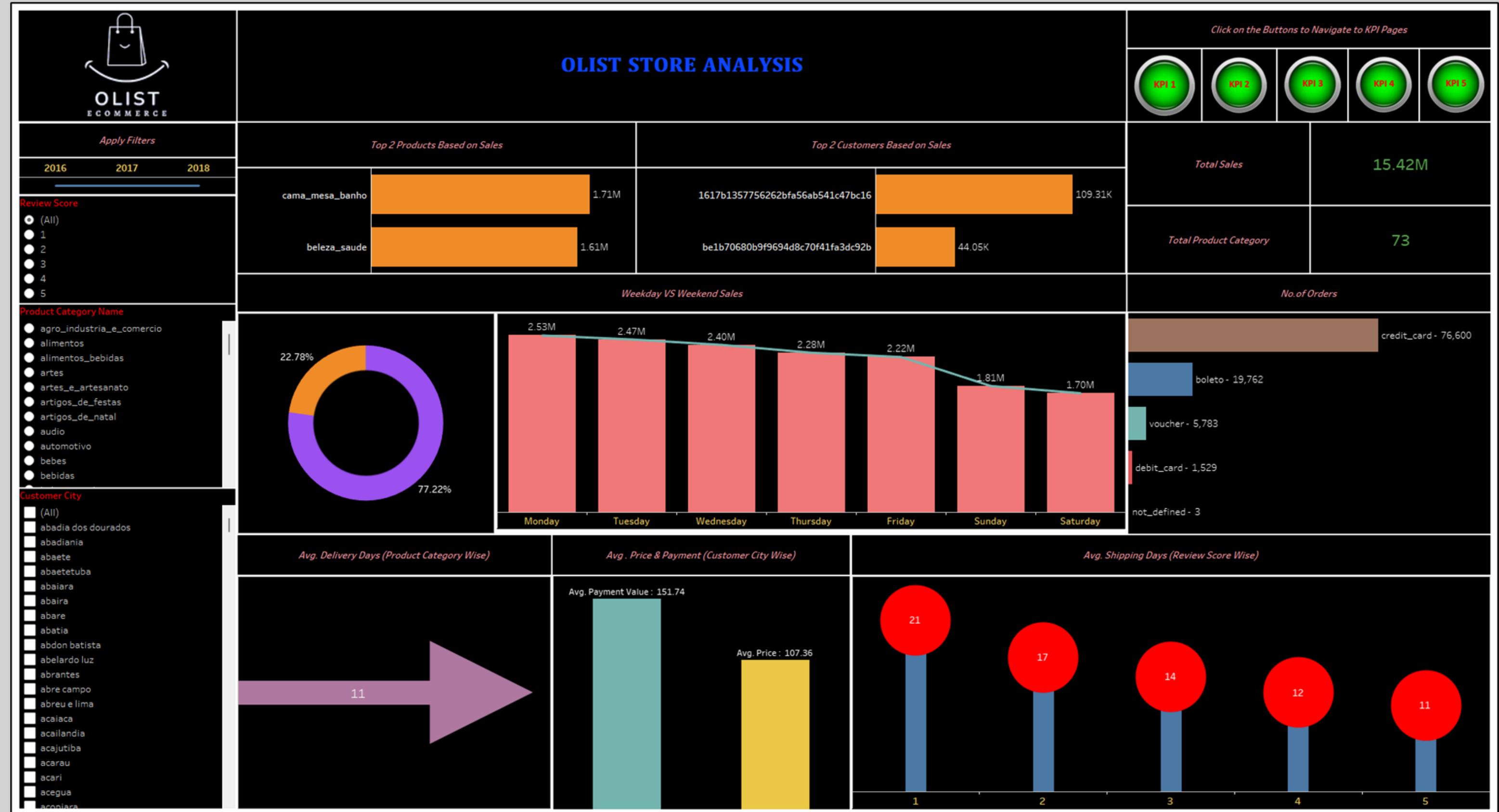
# DASHBOARDS

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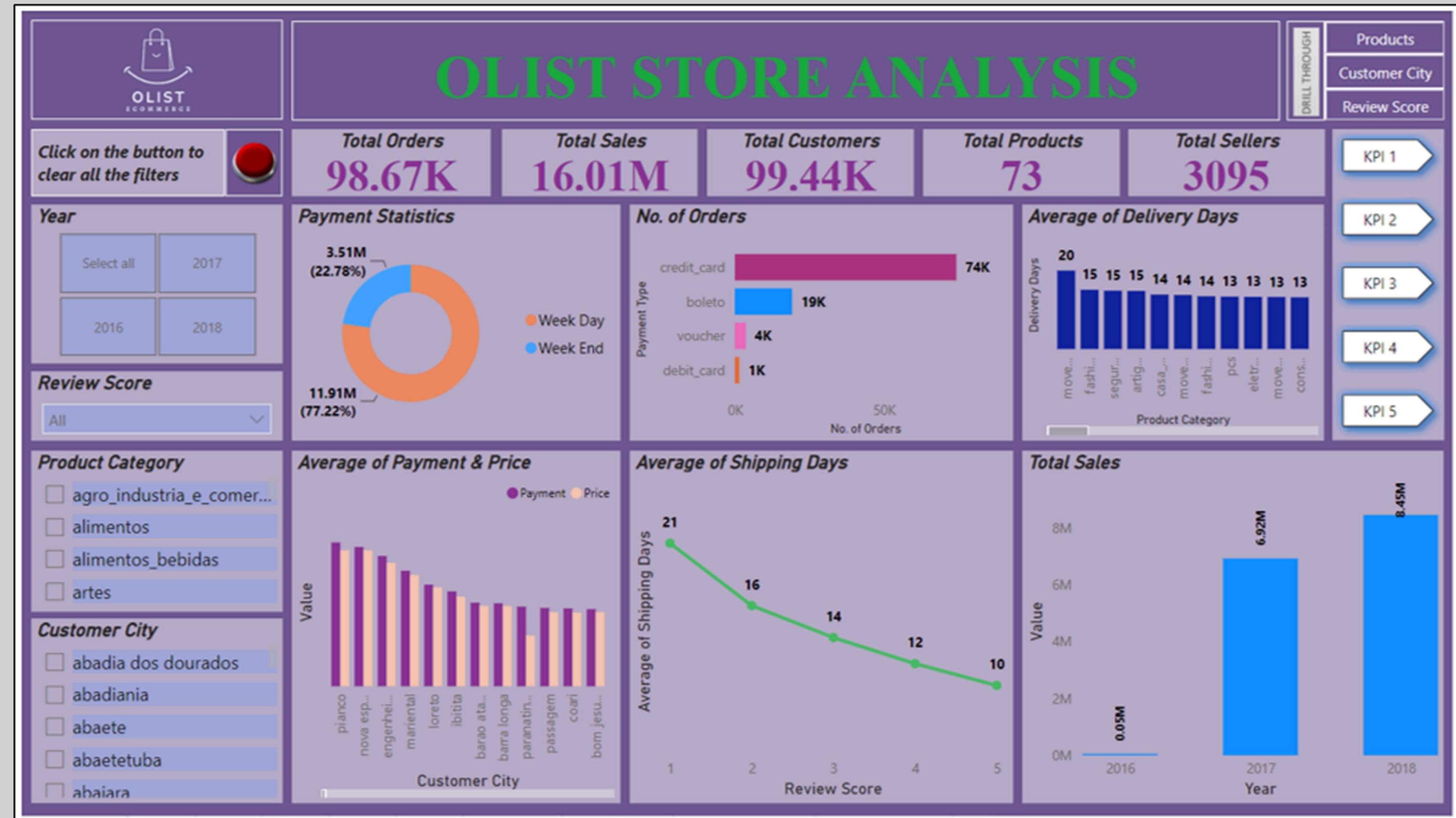
**EXCEL**



# TABLEAU



# POWER BI



# SUGGESTIONS

- The 'Olist Store Analysis Project' provides valuable insights of customers satisfaction and their thoughts on company's product & service.
- The analysis of the KPIs help the company in identifying areas of improvement and to take necessary actions.
- It is recommended to concentrate on week end sales, and to provide any special offers so as to increase the sales.
- The company can provide any vouchers or special discounts for credit card payments which may improve customer satisfaction and accordingly will reflect on customer reviews.
- The company can bring more competitive prices to increase the sales and to attract the customers.
- Since the long delivery/shipping days affects the customer satisfaction, company shall focus on increasing the delivery methods as much as possible to reduce the shipping days.
- The customer's review is mostly limited to review score, only (30-40)% of total reviews have the proper feedbacks. Hence the company shall implement any new methods/conduct surveys that might let them understand the customer's thought on their products & services.

# THANK YOU

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