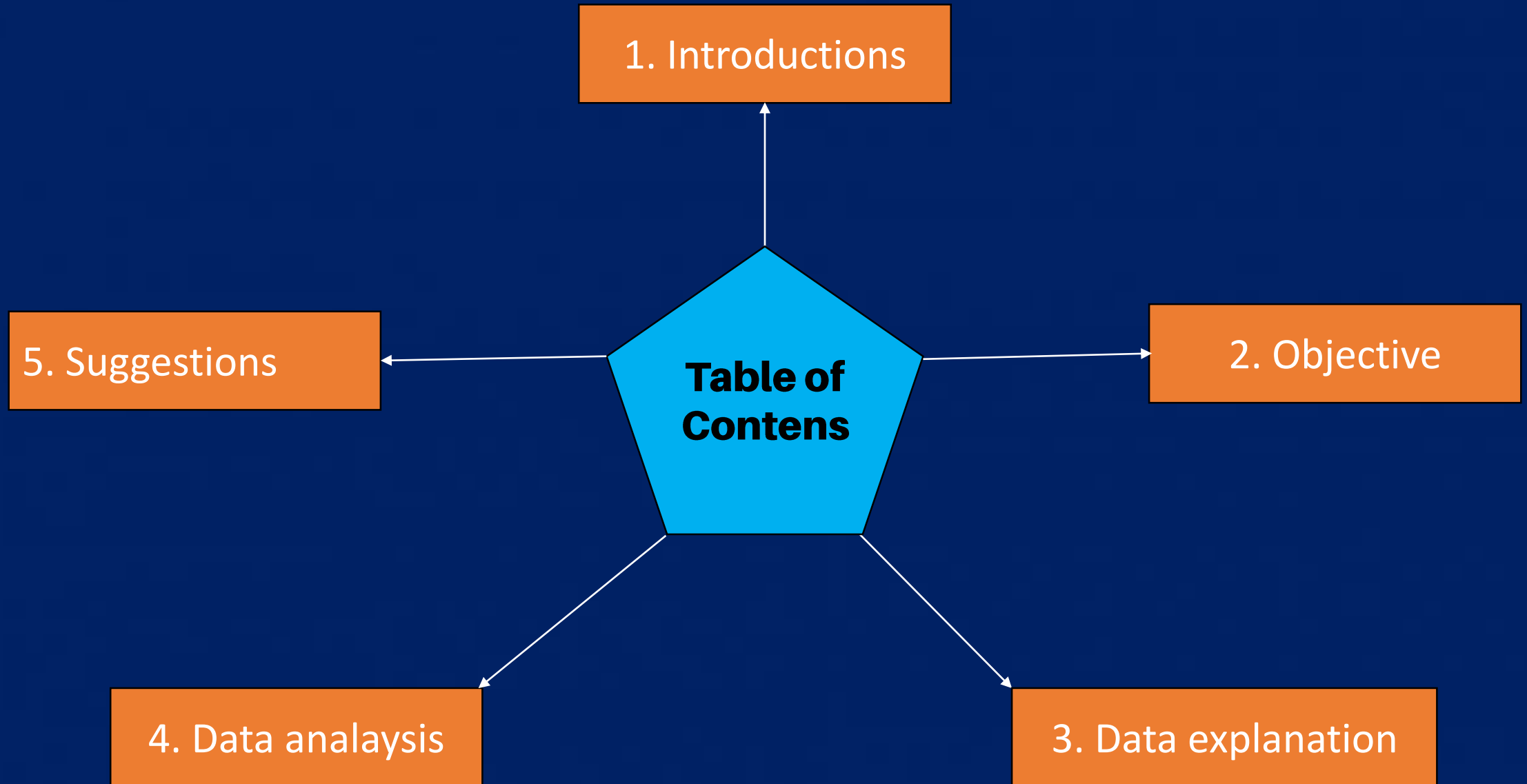


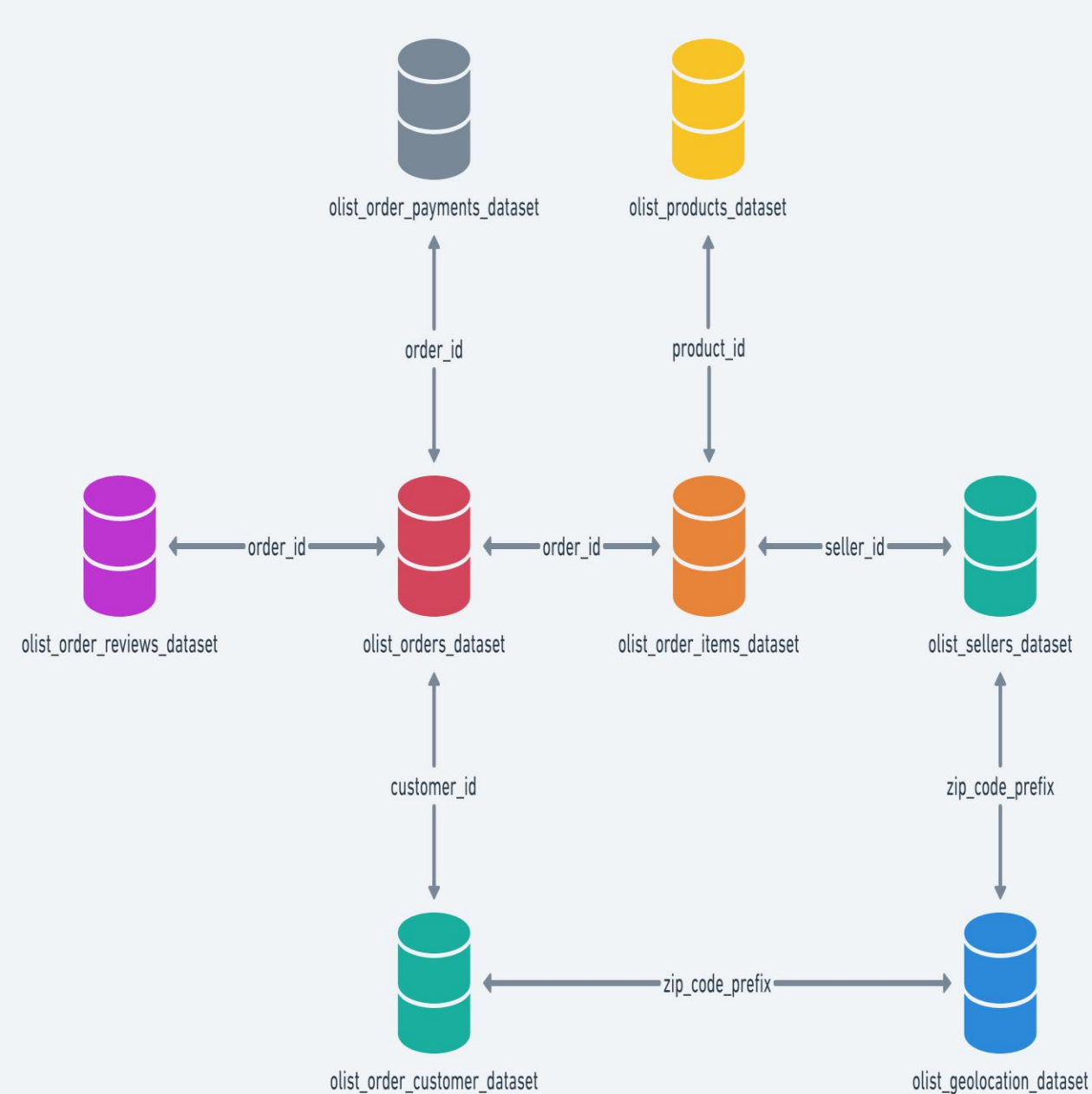


# Data Analysis of Olist Department Stores in Brazil





# Introductions



- The dataset used is a database from the Olist department store.
- Olist e-commerce is one of the largest department stores in Brazil which is a center for buying and selling products.
- Olist e-commerce focuses on helping sellers, especially small groups, to market their products.
- Apart from being a place for buying and selling, Olist also provides delivery services, making it easier for both.
- This dataset contains a collection of product, payment and order status information, which has been collected from 2016 to 2018.

# Objective

The logo for 'olist store' is displayed in white text on a blue background. The word 'olist' is in a large, bold, sans-serif font, and 'store' is in a smaller, regular, sans-serif font below it. The background features abstract blue shapes: a small circle in the top left, a large arc in the top right, and a horizontal rectangle in the bottom left.

olist  
store

## Purpose

Find out what happened in department stores from 2016 to 2018, starting from customer demographics, order behavior, customer reviews, to weekly analysis.

## Hope

After this analysis is carried out is to increase the number of sales in 2024, both in terms of number of products, financial value, or additional customers, etc.

# Data Explanation

## Data analysis stages

- Import library
- import dataset
- Merge dataset
- Data cleansing (missing value and check duplicate row)
- Data analysis
- Visualization

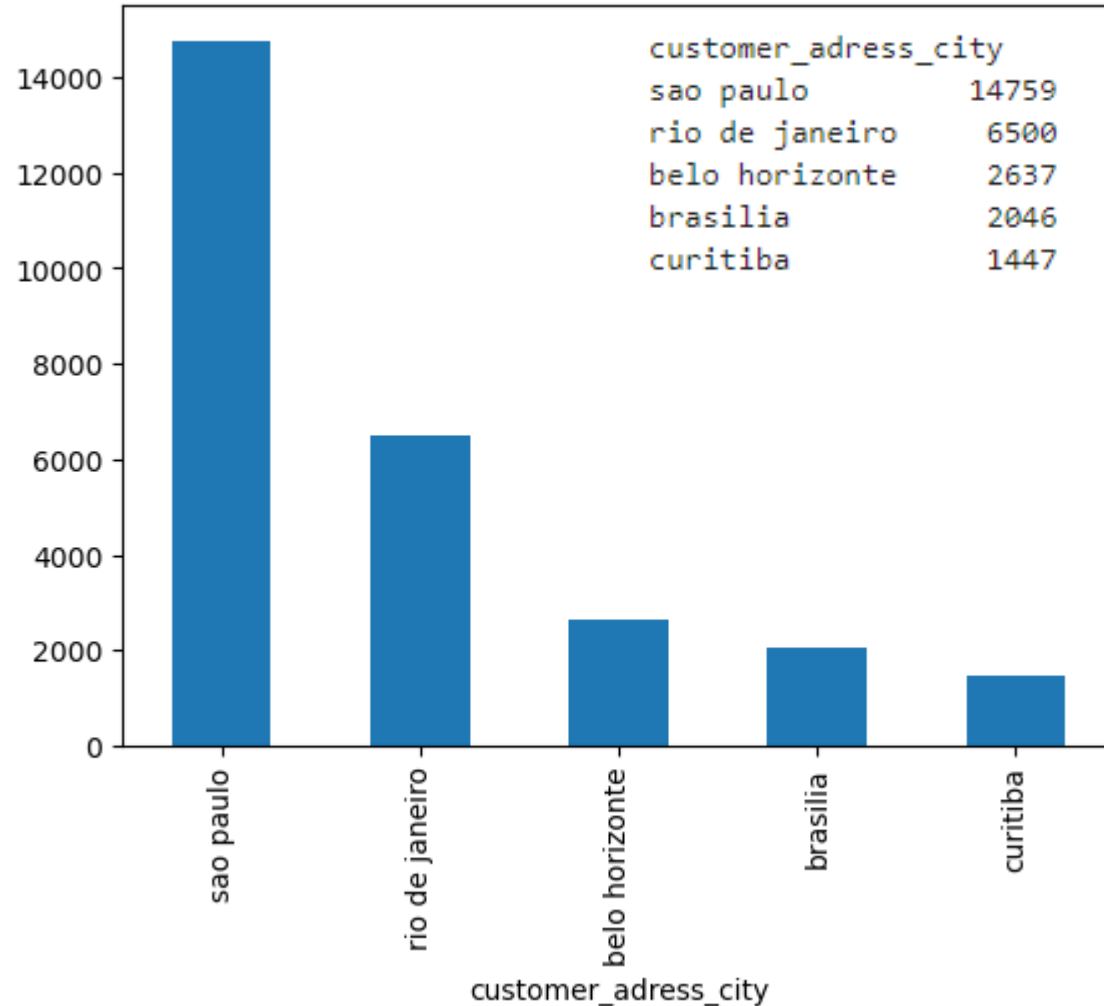
## Data analysis

- Top most and lowest customer orders beside on adress
- Analysis order time based on month, day, and hour
- Analysis order per weekly
- Analysis average order 2016 to 2018
- Make category customer based on total value and item order
- Make clasification review customers
- Top most and lowest category product
- Payment method popular



# Data Analysis

City with top 5 most customers



The city with the lowest 5 customers

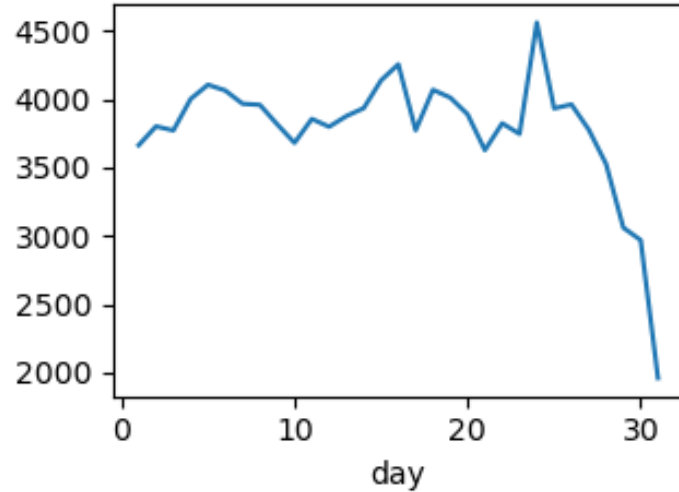
customer_adress_city	customer_count
mauriti	1
capela nova	1
rosario	1
monteiropolis	1
montividiu do norte	1

# Order time based on month, day, and time

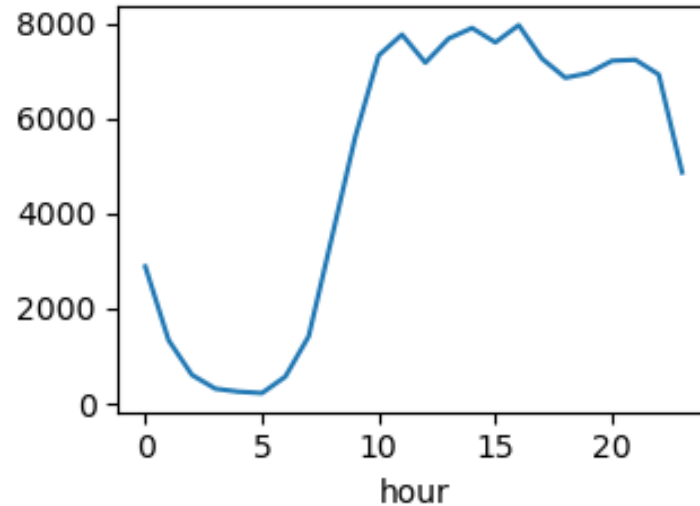
day

1	3662
2	3800
3	3770
4	4000
5	4104
6	4062
7	3965
8	3957
9	3815
10	3679
11	3854
12	3797
13	3875
14	3933
15	4136
16	4253
17	3771
18	4067
19	4010
20	3888
21	3626
22	3822
23	3745
24	4559
25	3931
26	3960
27	3776
28	3525
29	3059
30	2968
31	1960

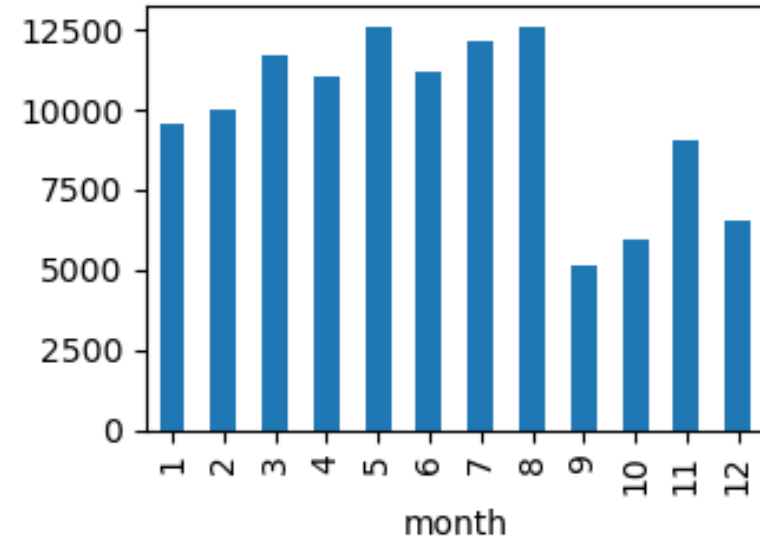
Calculation order based on day



Calculation order based on hour



Calculation order based on month



month

1	9534
2	10002
3	11692
4	11043
5	12585
6	11149
7	12148
8	12597
9	5100
10	5943
11	9014
12	6522
..	.

Month

-Highest : 8  
-Lowest : 9

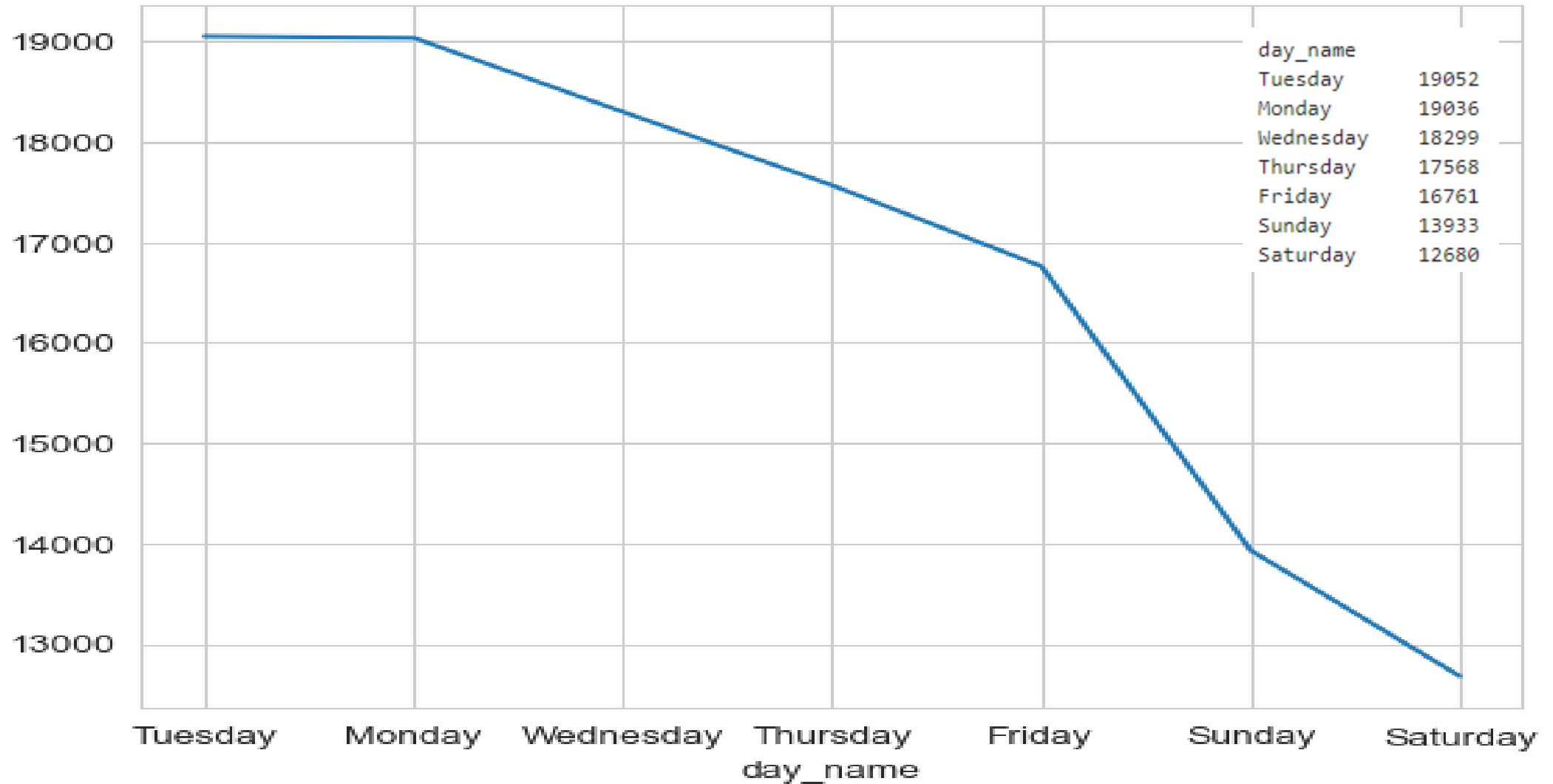
Day

-Highest : 24  
-Lowest : 31

Hour

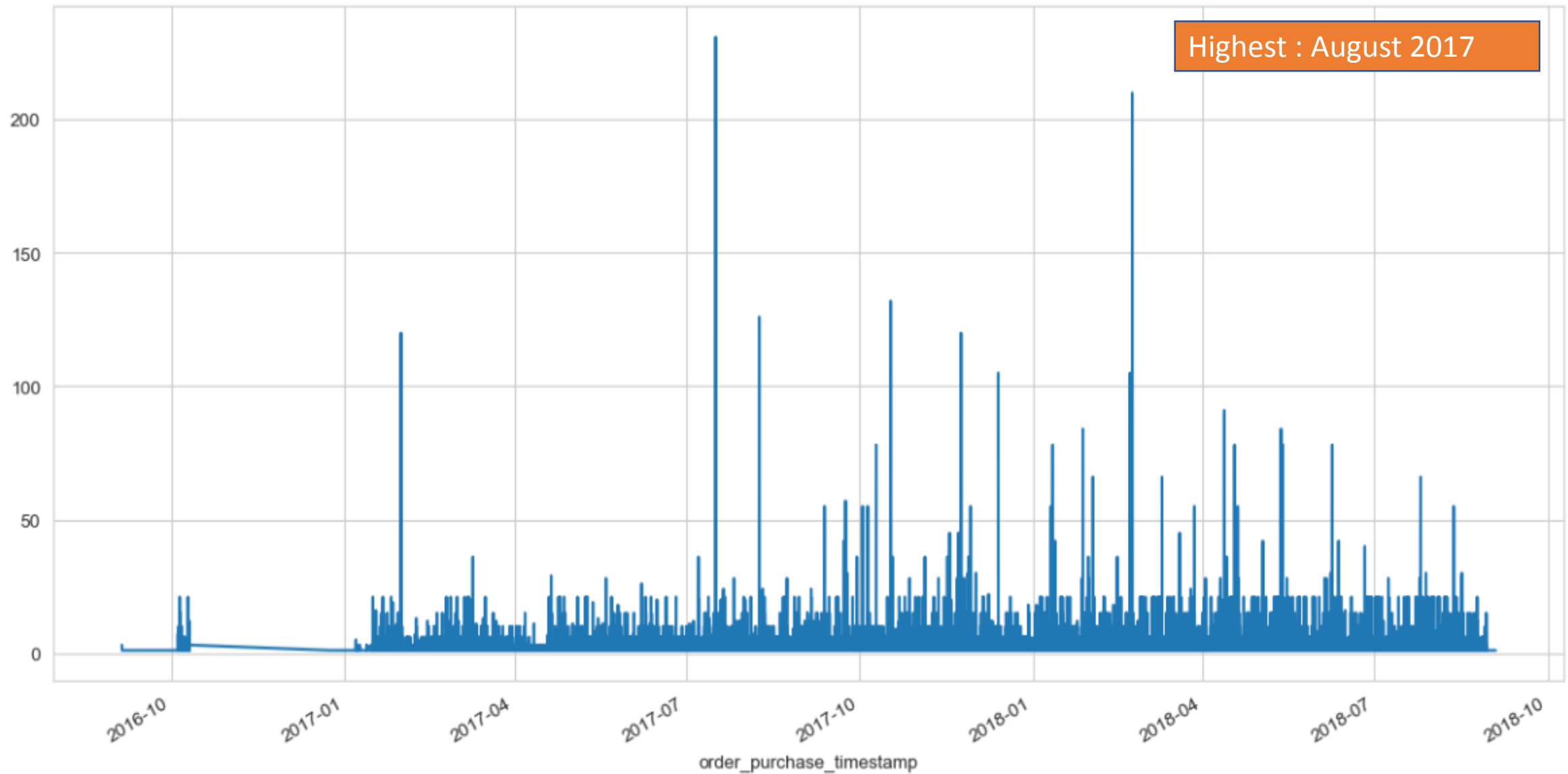
-Highest : 16.00  
-Lowest : 05.00

## Order per weekly (sunday to saturday)





# Order 2016, 2017, and 2018



# Categories customers and reviews

Customer category based on total value price

	total_order_value				
	min	max	mean	median	count
V_score					
cheap	10.07	998.58	156.317935	108.625	96010
normal	1000.08	2499.20	1464.344026	1351.480	1607
expensive	2501.62	61488.36	4669.022308	3495.800	299

Average

Total review (4-5 puas, 1-3 tidak puas)

	category	category
4.0	puas	88550 0.754715
	tidak_puas	28779 0.245285

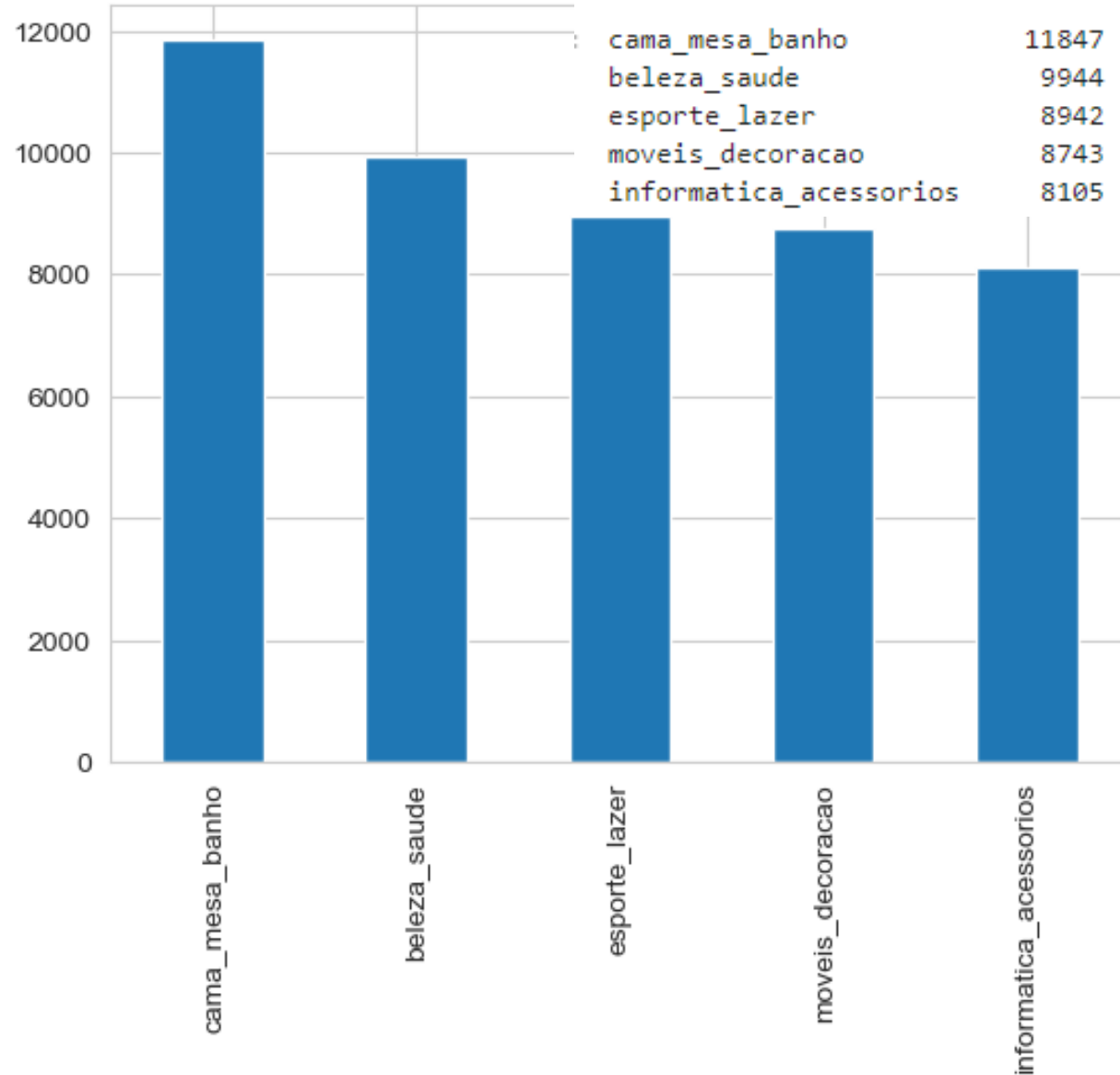
Customer category based on total item order

	order_id				
	min	max	mean	median	count
F_score					
little	1	5	1.033048	1.0	94710
lot	6	16	7.600000	6.5	10

Details review :  
1-3 tidak puas  
4-5 puas

# Average total orders category product 2016, 2017, 2018

## Top 5 most product



## Lowest 5 product

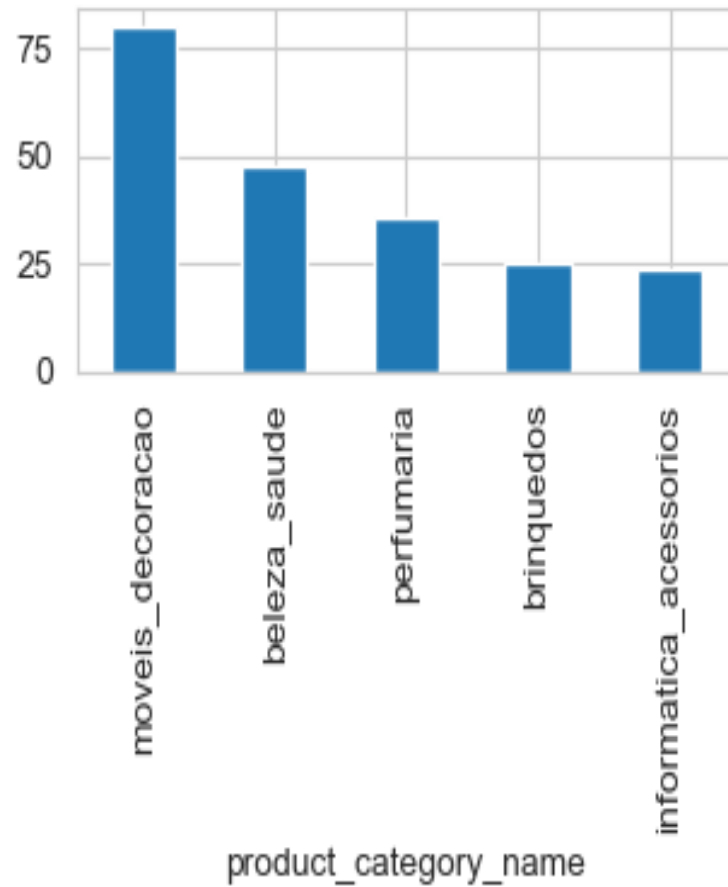
seguros_e_servicos	2
fashion_roupa_infanto_juvenil	8
pc_gamer	10
cds_dvds_musicais	14
portateis_cozinha_e_preparadores_de_alimentos	15
...	

## Top 5 customer ID with the most product purchases

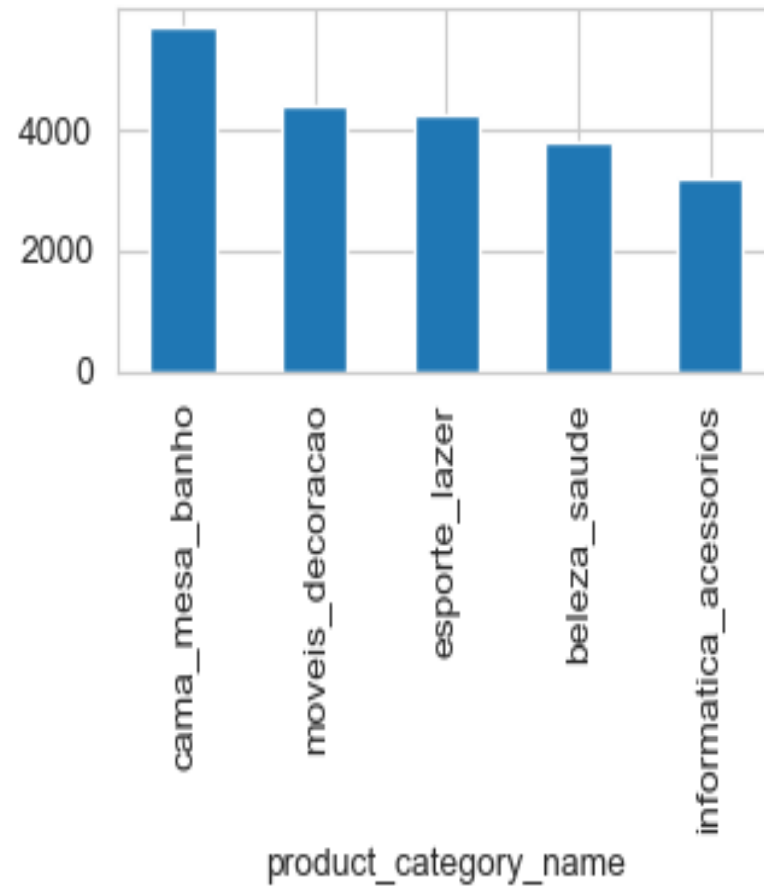
customer_id	product_category_name	
270c23a11d024a44c896d1894b261a83	cama_mesa_banho	42
13aa59158da63ba0e93ec6ac2c07aacb	moveis_escritorio	38
9af2372a1e49340278e7c1ef8d749f34	ferramentas_jardim	29
92cd3ec6e2d643d4ebd0e3d6238f69e2	cama_mesa_banho	26
2ba91e12e5e4c9f56b82b86d9031d329	perfumaria	24

# Most category product populer

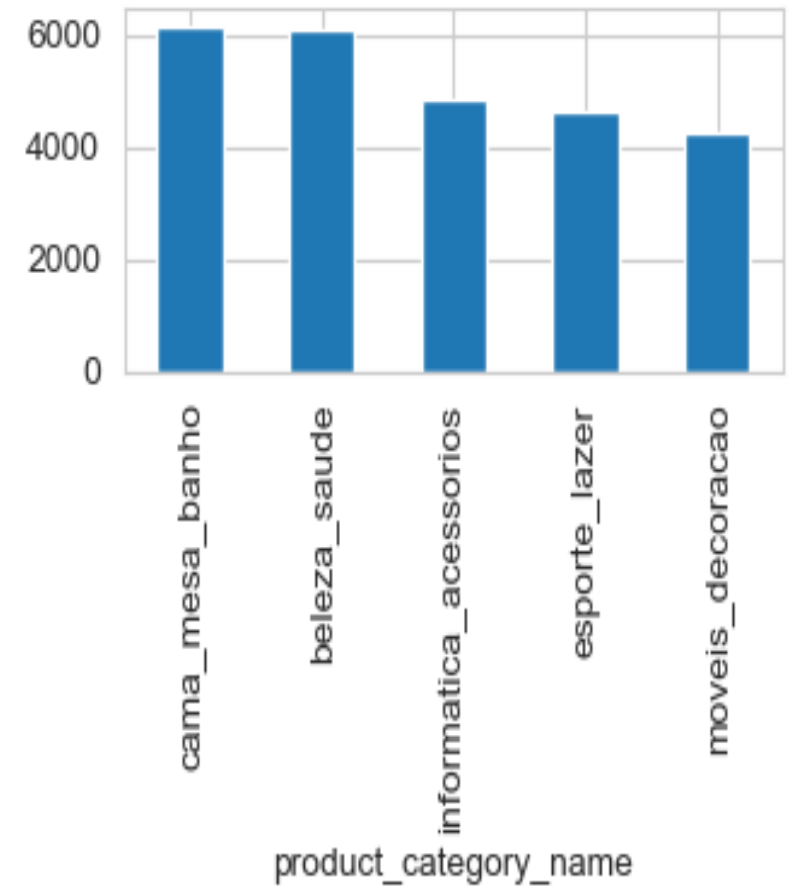
Most Category Product 2016



Most Category Product 2017

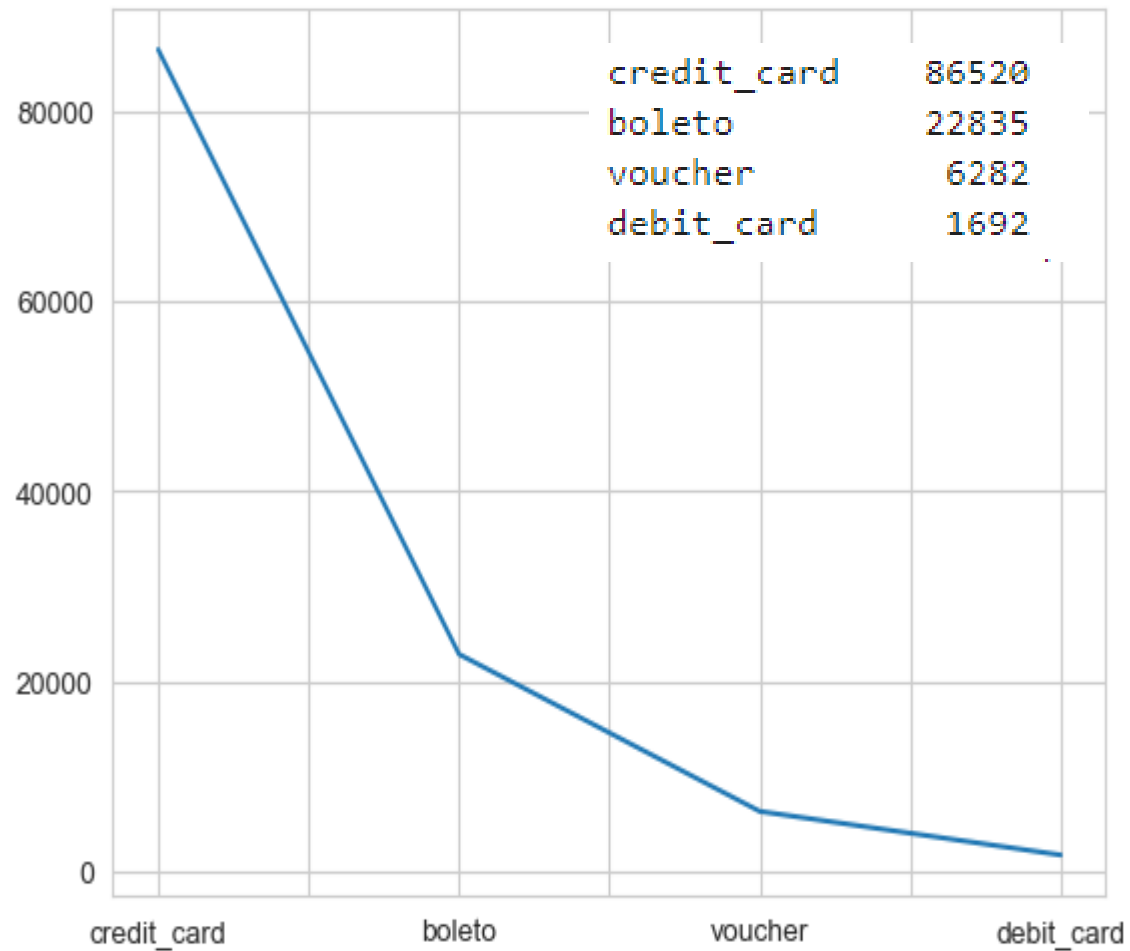


Most Category Product 2018

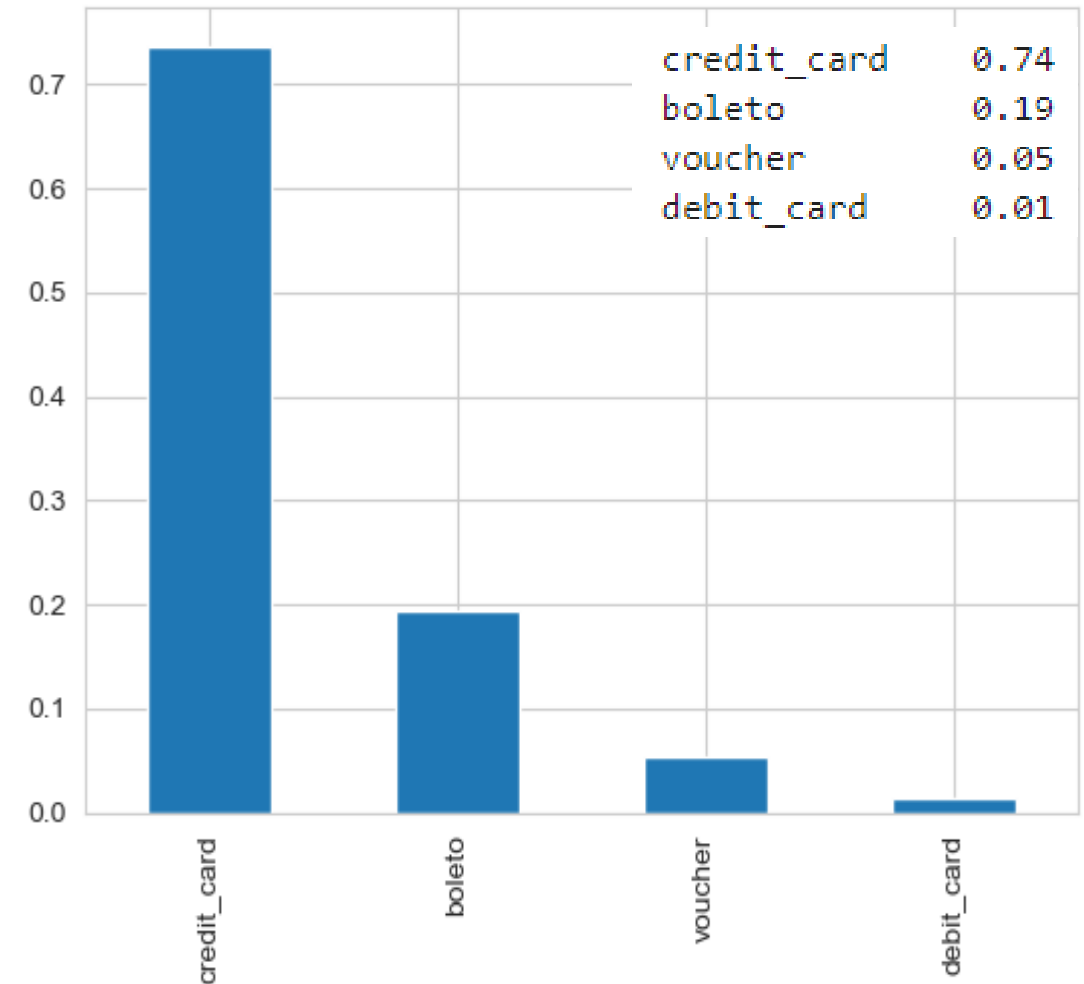


# Total payment popular methods

## Payment methods amount



## Payment methods percentage



# Suggestions

For cities with the lowest number of orders, you can find out the cause. Are there any problems with the payment system, or difficulty in accessing product delivery, etc

To review comments from customers, whether positive or negative, they can be used as a guide to create future strategies

For products with small purchases, they can be used as evaluation material, whether they are less competitive with other marketplaces, the price is too expensive, etc

For customer IDs with small purchases, special offers can be given, for example free shipping, discounts for purchasing products, etc. So that they can be interested in buying more products, and making olist the main item buying platform.





olist

**Thank You**