

## "KPIs in Python after data cleaning"

### ➤ Sales & Revenue KPIs:

1. Total Revenue (Sum of price + freight\_value for delivered orders):

**(Total Revenue: 15419773.75)**

2. Expected Revenue (Sum of price + freight\_value for approved orders):

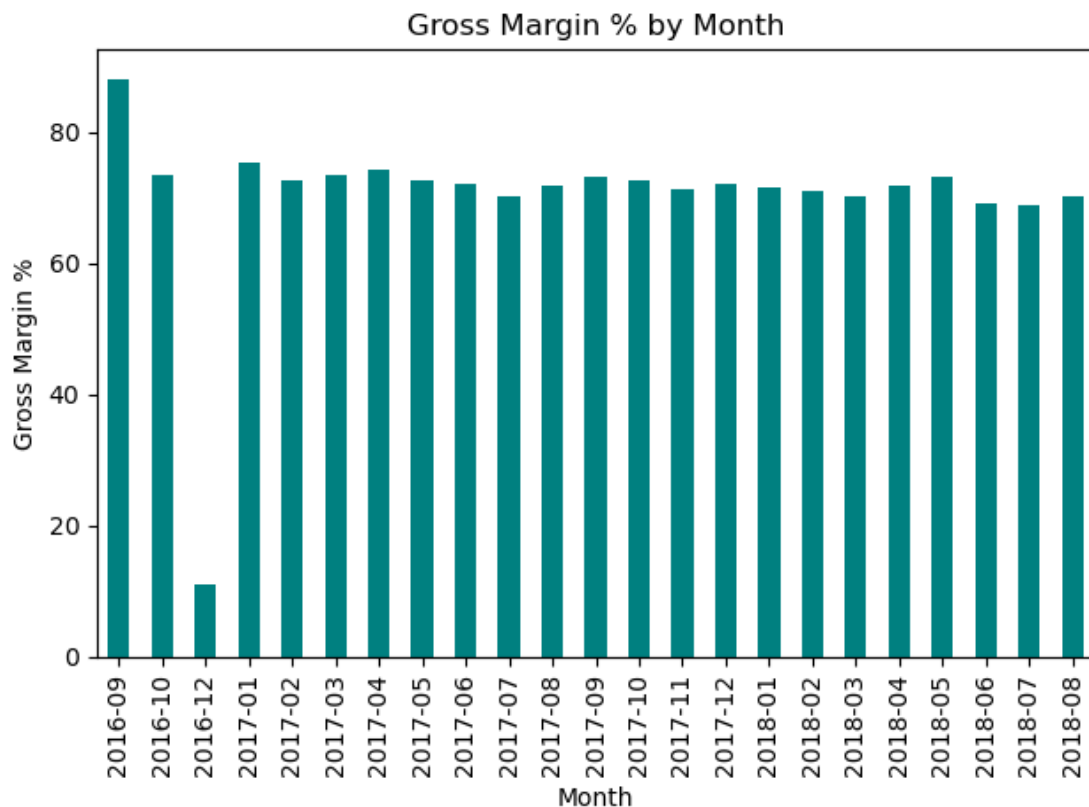
**(Expected Revenue: 241.08)**

3. Net Profit (price - freight\_value for delivered orders):

**(Net Profit: 11023222.47)**

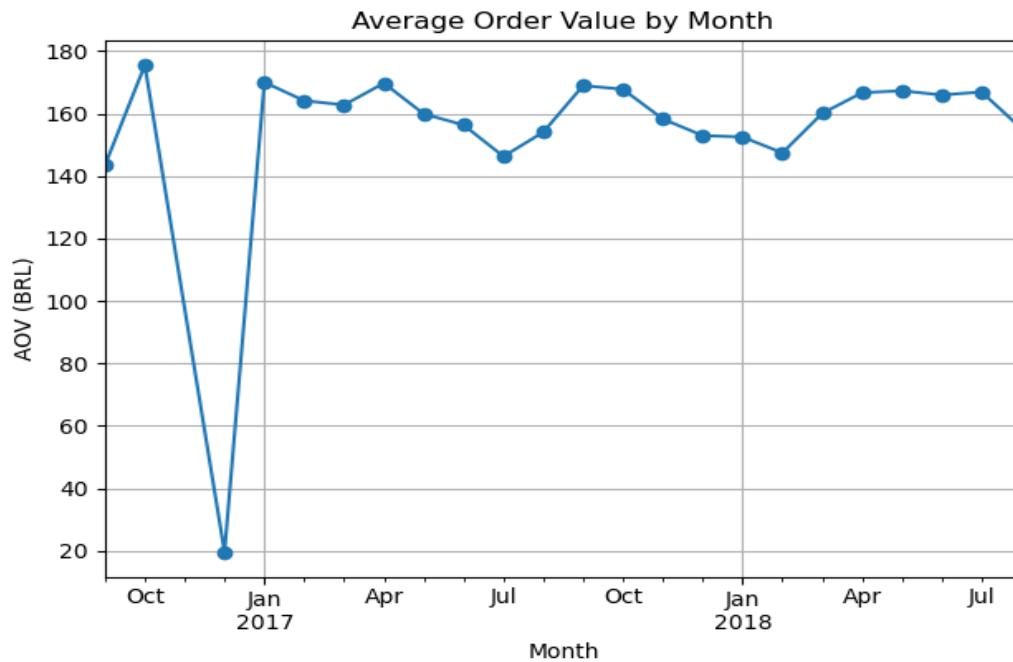
4. Gross Margin % ((Net Profit ÷ Total Revenue) × 100):

**(Gross Margin %: 71.49)**



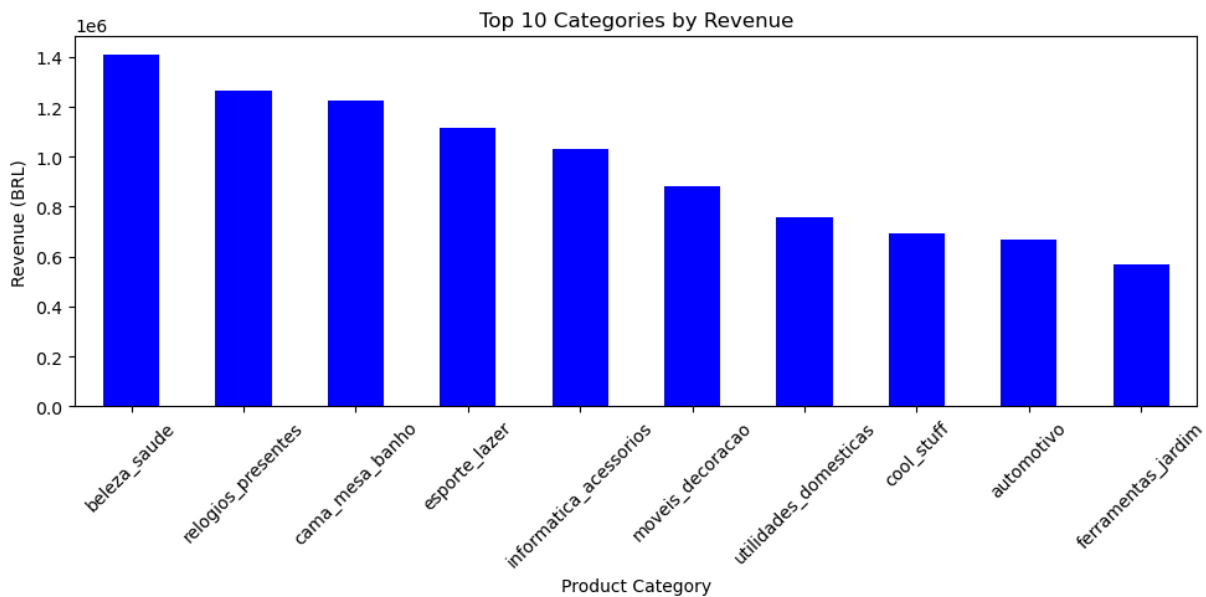
5. Average Order Value (AOV) (Total Revenue ÷ Number of Delivered Orders):

**(Average Order Value (AOV): 159.83)**



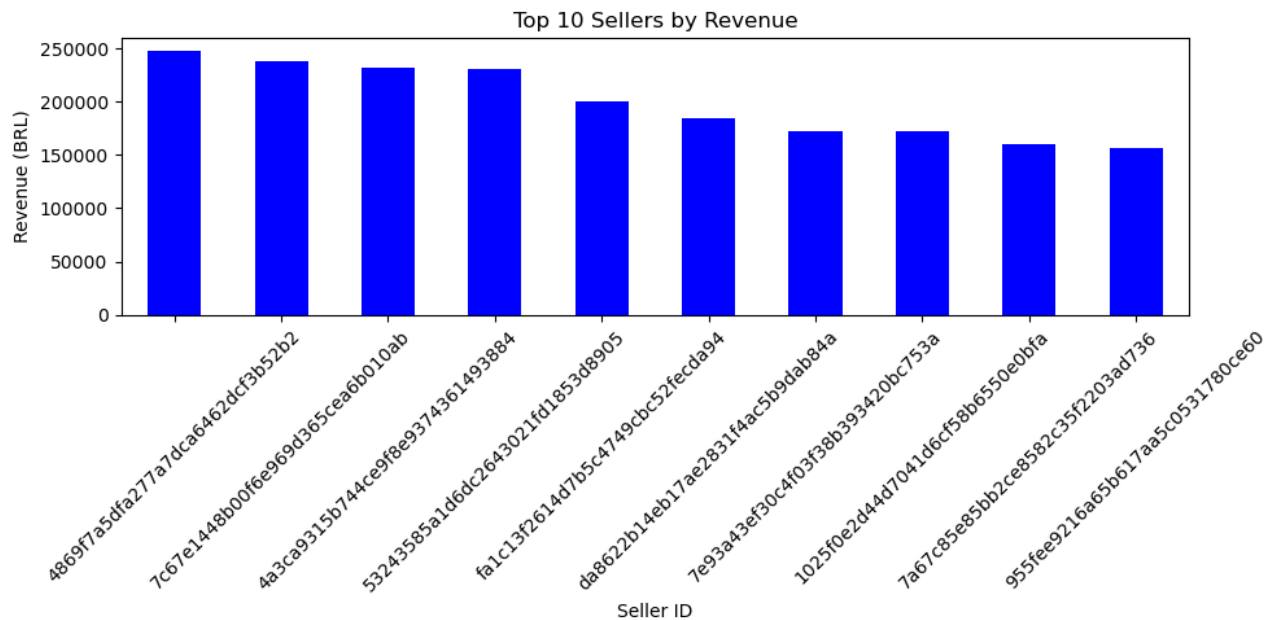
6. Revenue by Product Category (Helps find the most profitable categories):

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:eba17e16-12ca-4c16-a430-631c4e8816eb>



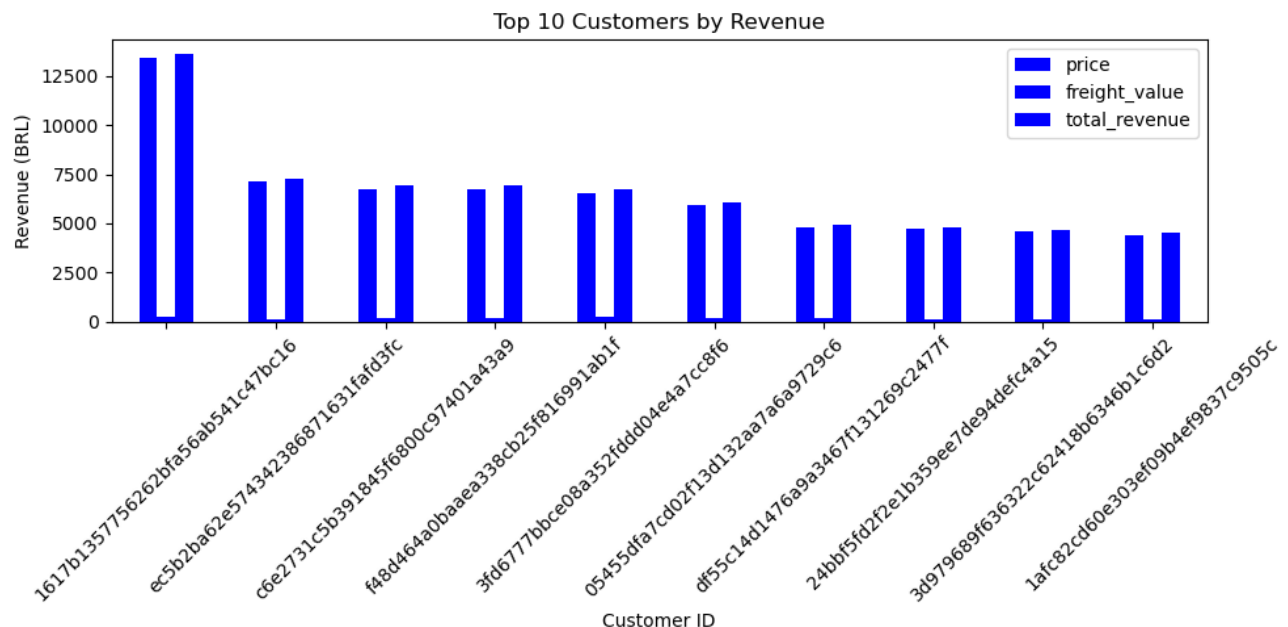
## 7. Revenue per Seller (Seller-level performance):

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:f5367622-f8a6-416f-9bca-2d489d297717>



## 8. Revenue per Customer (identifies high-value customers):

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:6f22ea7d-c7af-42ad-8823-d2d512d99739>

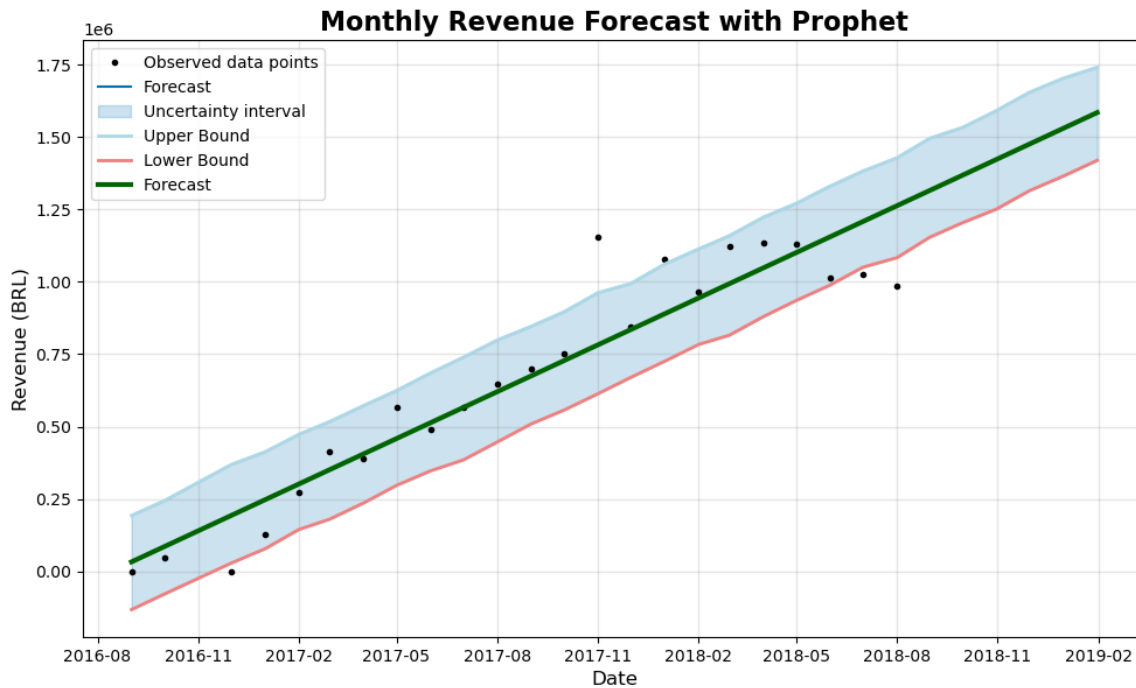


9. % Orders with Freight > Product Price (Signals cost/pricing issues):

**(% Orders where Freight > Product Price: 3.64 %)**

10. Monthly Revenue Forecast:

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:3b7f984f-bff4-42b5-a2b5-aa8a4aafb866>



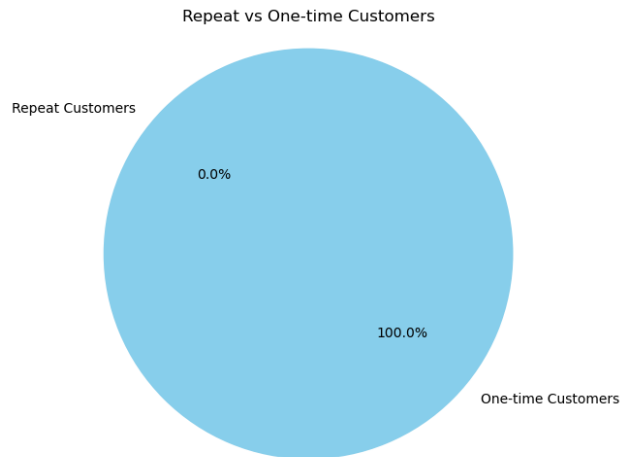
➤ Customer KPIs:

11. Number of Unique Customers:

**(Total Unique Customers: 99441)**

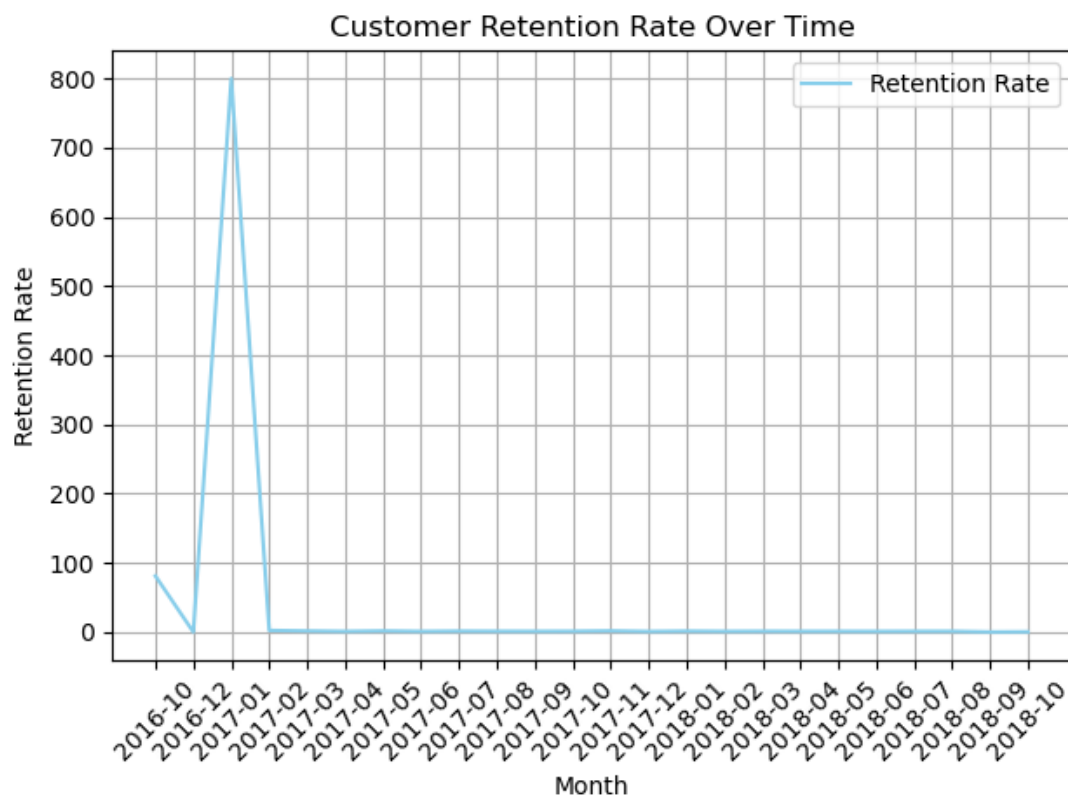
12. Returning Customers (Count of customers with more than one purchase):

**(Repeat Customers: 0)**



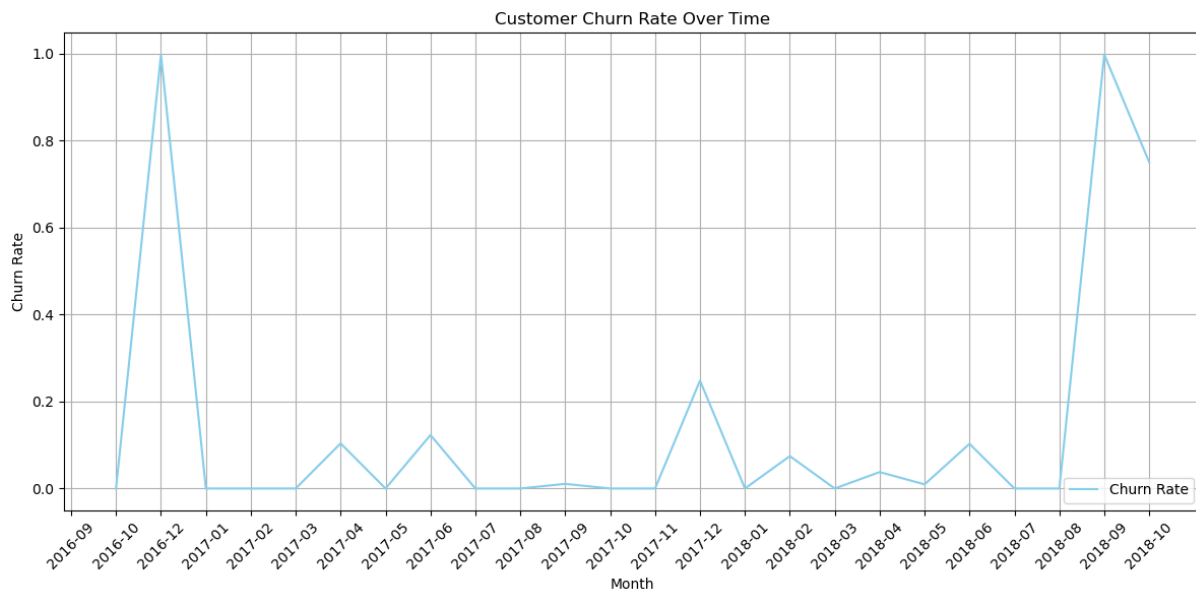
13. Customer Retention Rate (if time range allows):

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:99691c72-92a5-436e-9d7d-ab4e91e5cbf5>



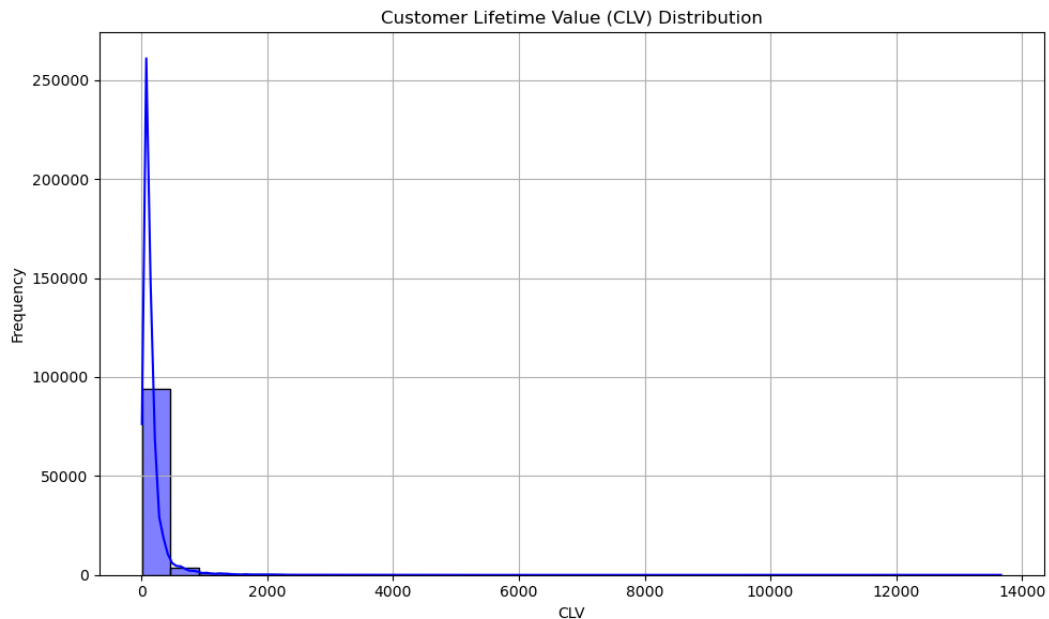
#### 14. Customer Churn Rate:

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:2a39fd86-029d-4aa1-bfb6-7ea814cdce6a>



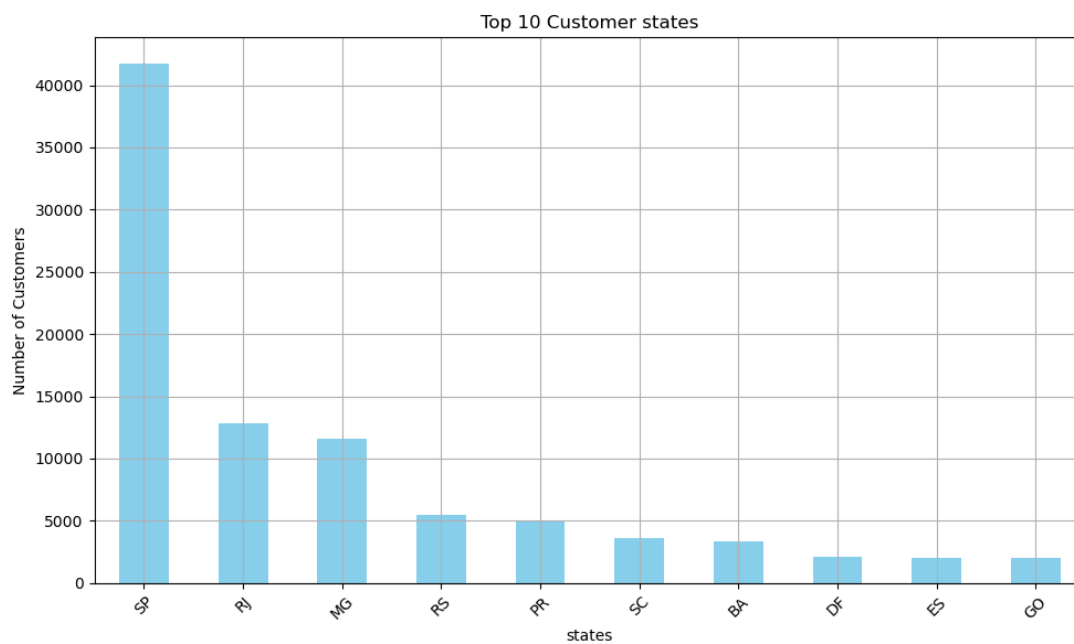
#### 15. Customer Lifetime Value (CLV):

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:af1bcf1f-73a7-461c-b4c1-e38dbcde209d>



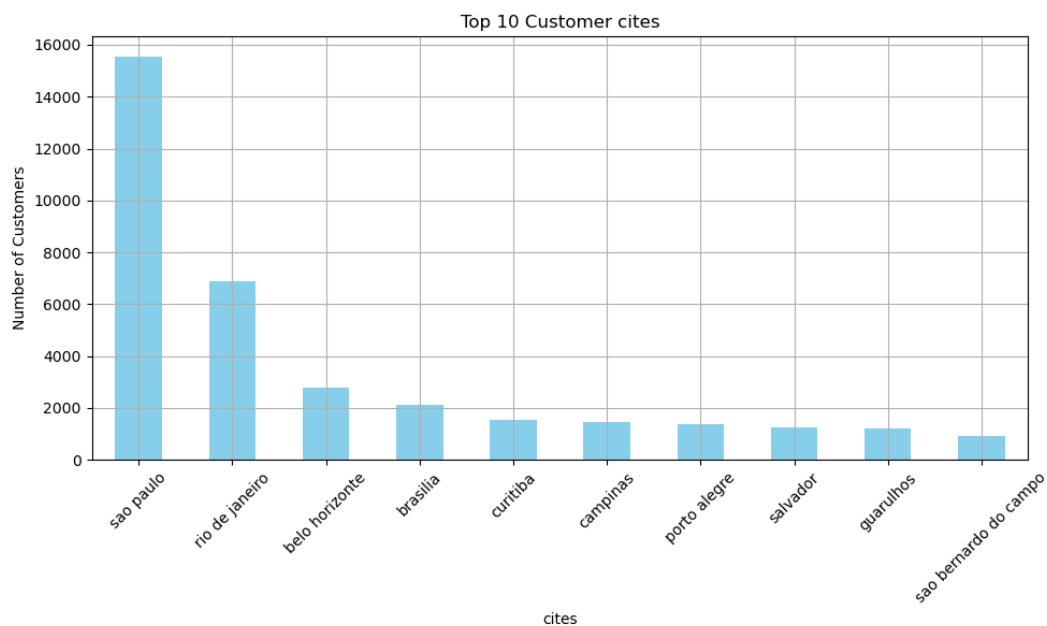
## 16. Top Customer Locations (Based on customer\_state):

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:7dab2f14-df0b-495c-aa95-6a0c3663bf2e>



(Based on customer\_city)

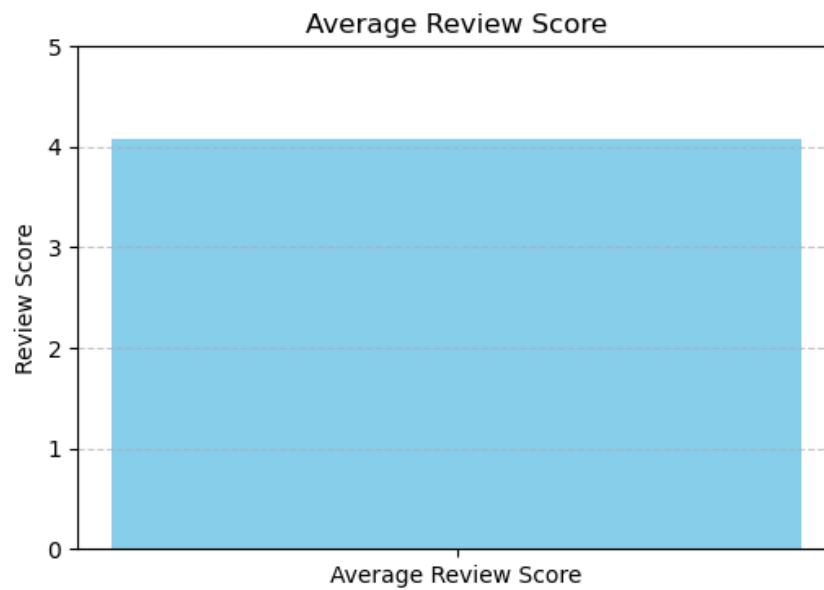
<https://acrobat.adobe.com/id/urn:aaid:sc:EU:27c3a9bf-1fa2-4e43-a0e8-278ecbce7150>



➤ Review & Satisfaction KPIs

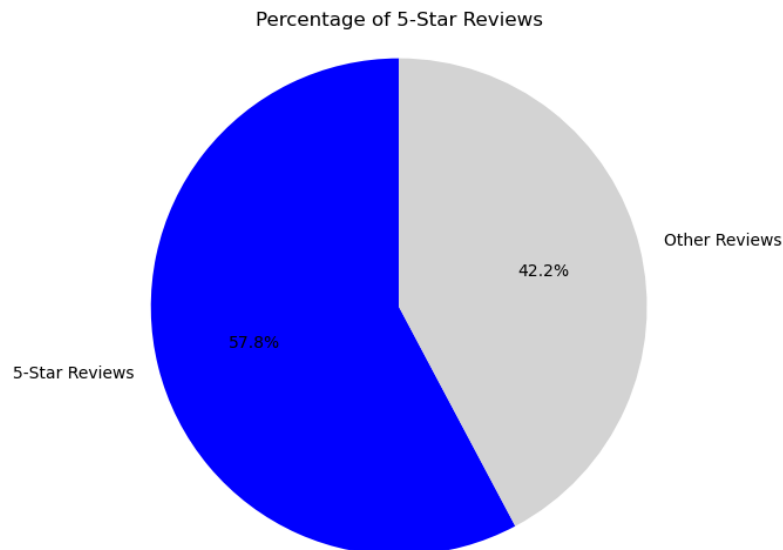
17. Average Review Score:

**(Average Review Score: 4.09)**



18. % of 5-Star Reviews:

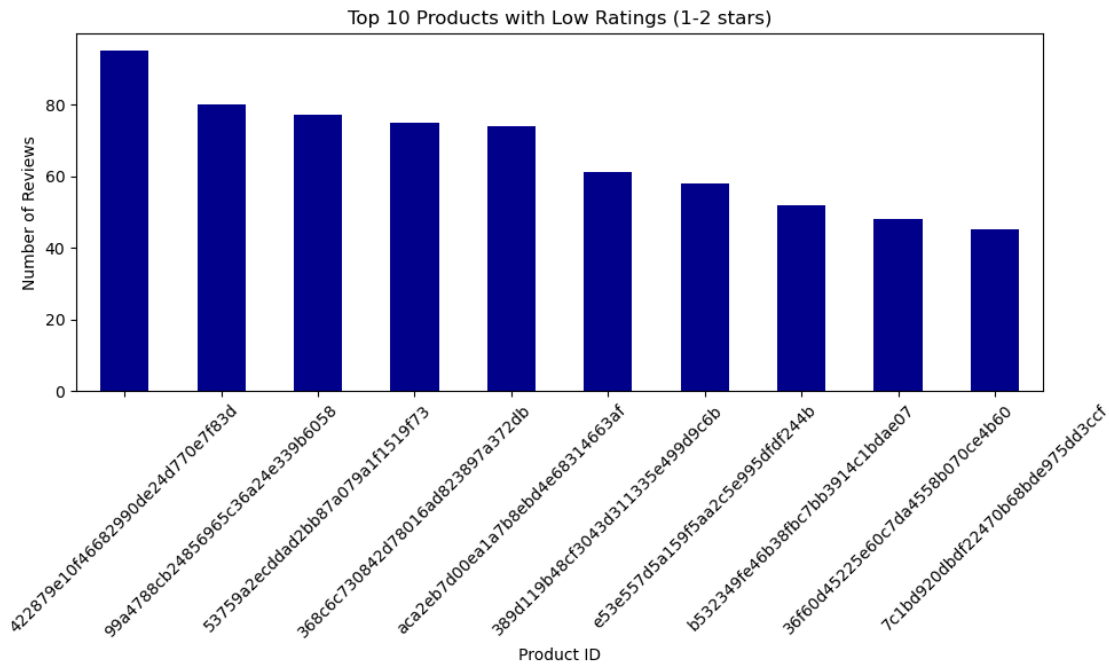
**(% of 5-Star Reviews: 57.78%)**





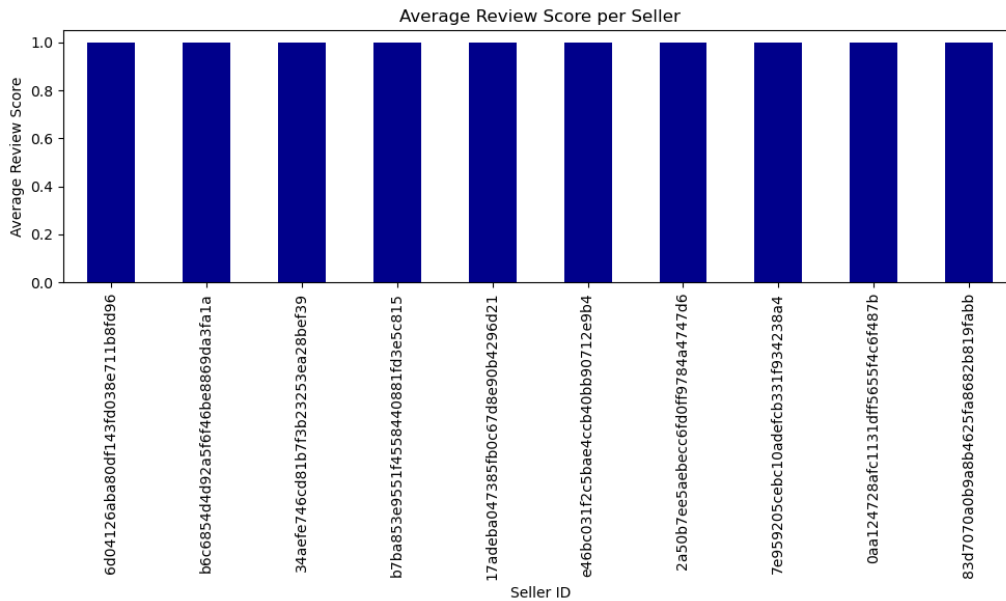
## 19. Top Products with Low Ratings (1–2 stars):

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:c72d9d67-7a53-4e97-845e-84562ee1de2b>



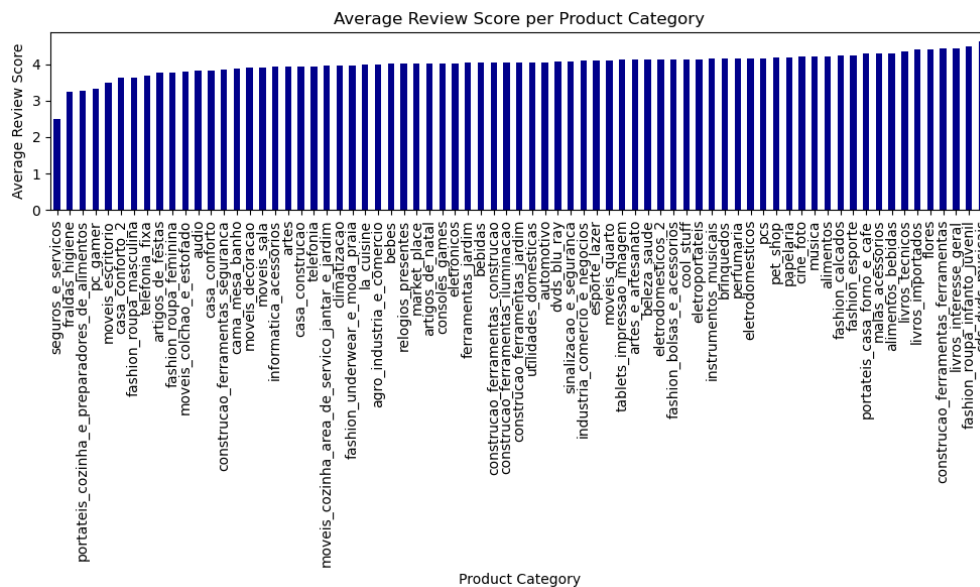
## 20. Average Review Score per Seller:

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:5ae5db60-4ab5-4be6-a991-8496a3873214>



## 21. Average Review Score per Product Category

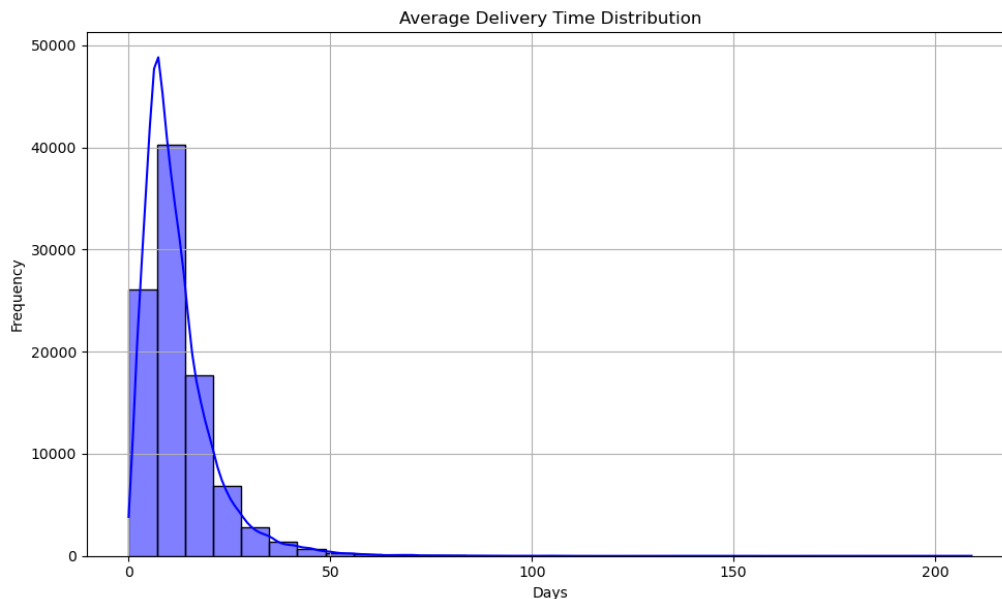
<https://acrobat.adobe.com/id/urn:aaid:sc:EU:018a57e9-949c-480b-839f-492de36d6fe5>



## ➤ Shipping & Delivery KPIs

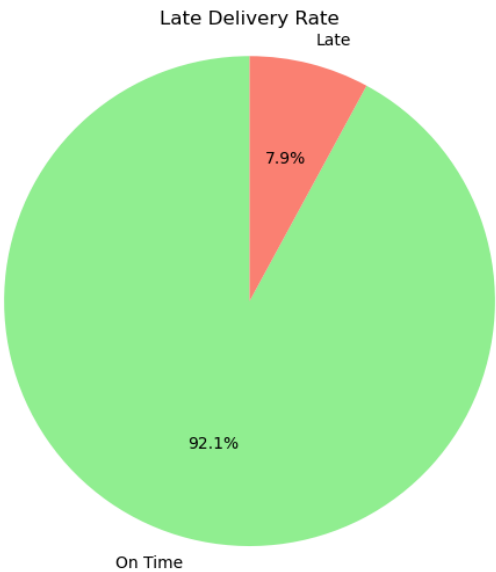
22. Average Delivery Time (order\_delivered\_customer\_date - order\_purchase\_timestamp):

(Average Delivery Time: 12.09 days)



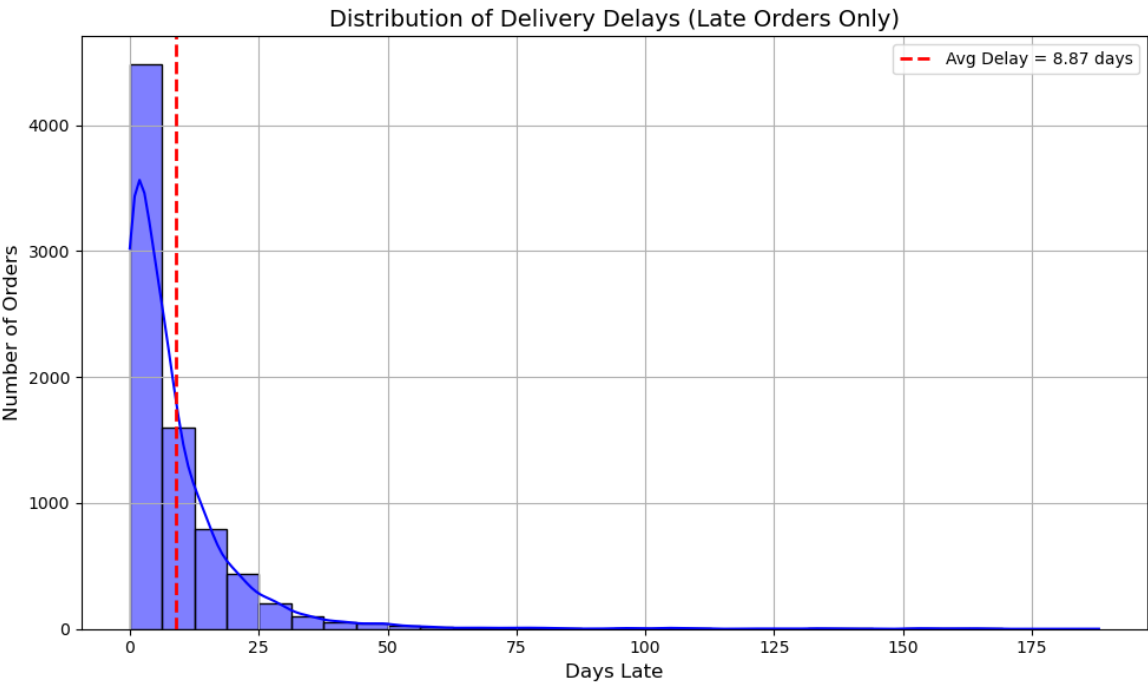
23. Late Delivery Rate:

(Late Delivery Rate: 7.91%)



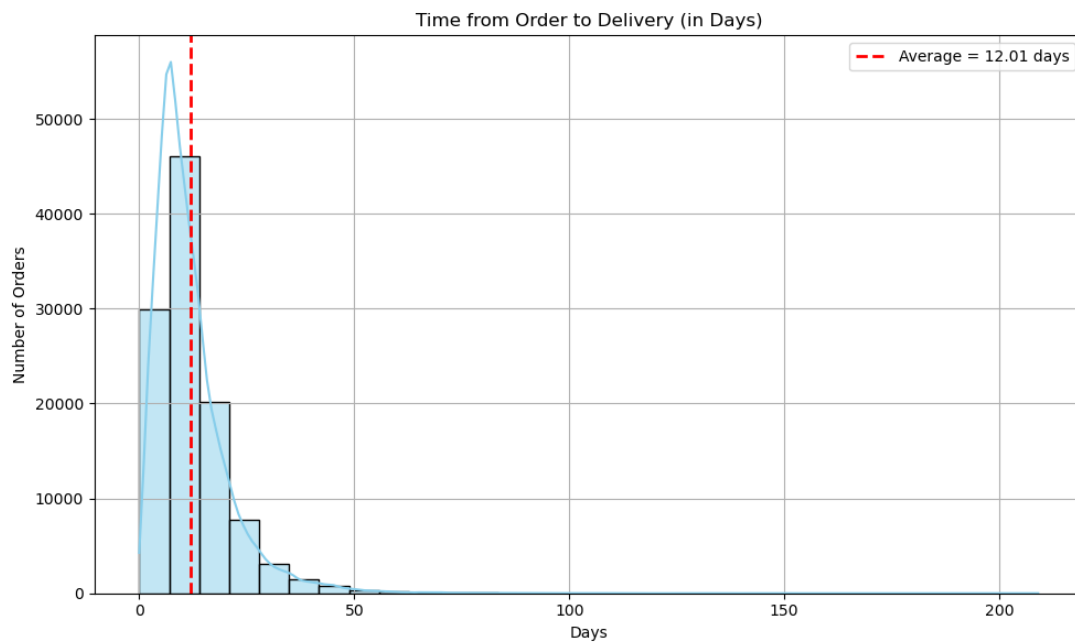
24. Delivery Delay (Avg. Days Late):

(Avg. Delay Days (Late Deliveries): 8.74 days)



25. Average Time from Order to Delivery (Total time from purchase to final delivery):

**(Average Time from Order to Delivery: 12.01 days)**



25. Shipping Time (order\_delivered\_customer\_date - order\_shipped\_at):

**(Average Shipping Time: 8.88 days)**



27. Order Handling Time (order\_approved\_at - order\_purchase\_timestamp):

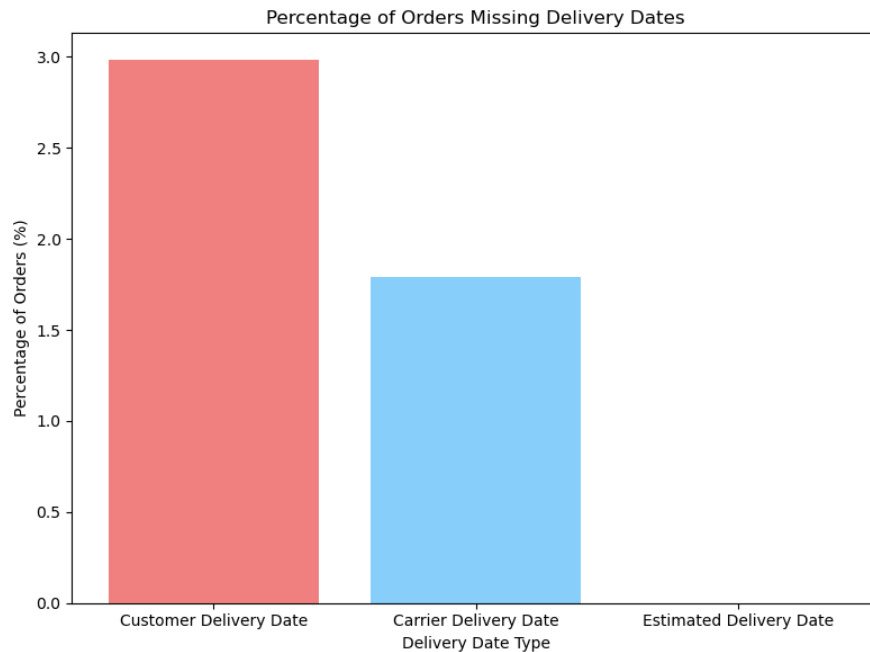
**(Average Order Handling Time: 10.42 hours)**

28. % of Orders with Missing Delivery Date:

**(% of Orders Missing Customer Delivery Date: 2.98%)**

**(% of Orders Missing Carrier Delivery Date: 1.79%)**

**(% of Orders Missing Estimated Delivery Date: 0.00%)**



## ➤ Payment KPIs

29. Popular Payment Methods:

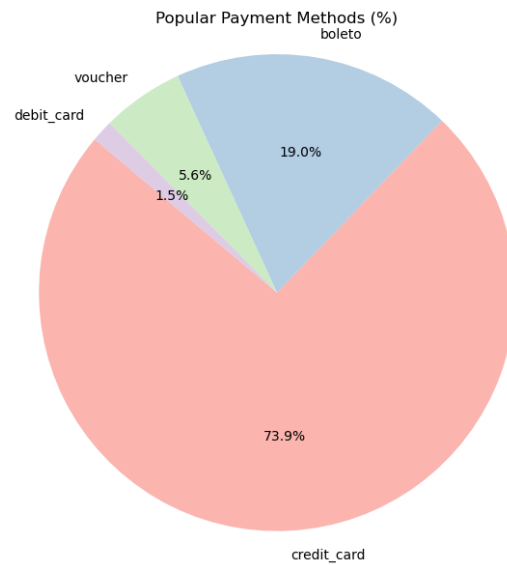
**(credit\_card 73.92 %)**

**(boleto 19.04 %)**

**(voucher 5.56 %)**

**(debit\_card 1.47 %)**

**(not\_defined 0.0 %)**

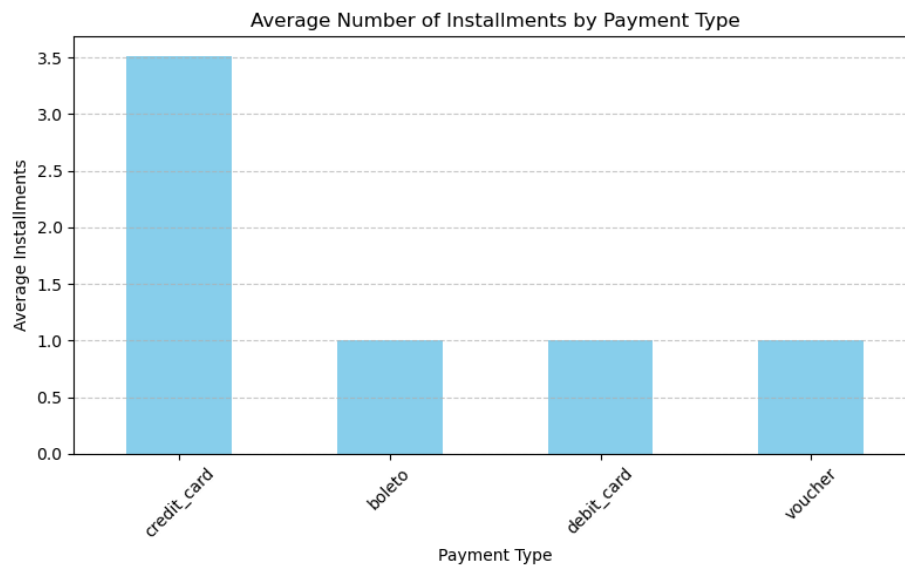


30. Average Number of Installments:

**(Average Number of Installments: 2.85)**

**Average Number of Installments by Payment Type:**

Average Number of Installments by Payment Type:	
payment_type	
boleto	1.00
credit_card	3.51
debit_card	1.00
not_defined	1.00
voucher	1.00



31. Installment Use Rate (% of orders using installments):

**(Installment Use Rate: 49.42%)**

32. Average Payment per Installment:

**(Average Payment per Installment: 79.57)**

33. Total Payments Received (Sum of all payment\_value):

**(Total Payments Received (Sum of all payment\_value): 16,008,872.12 BRL)**

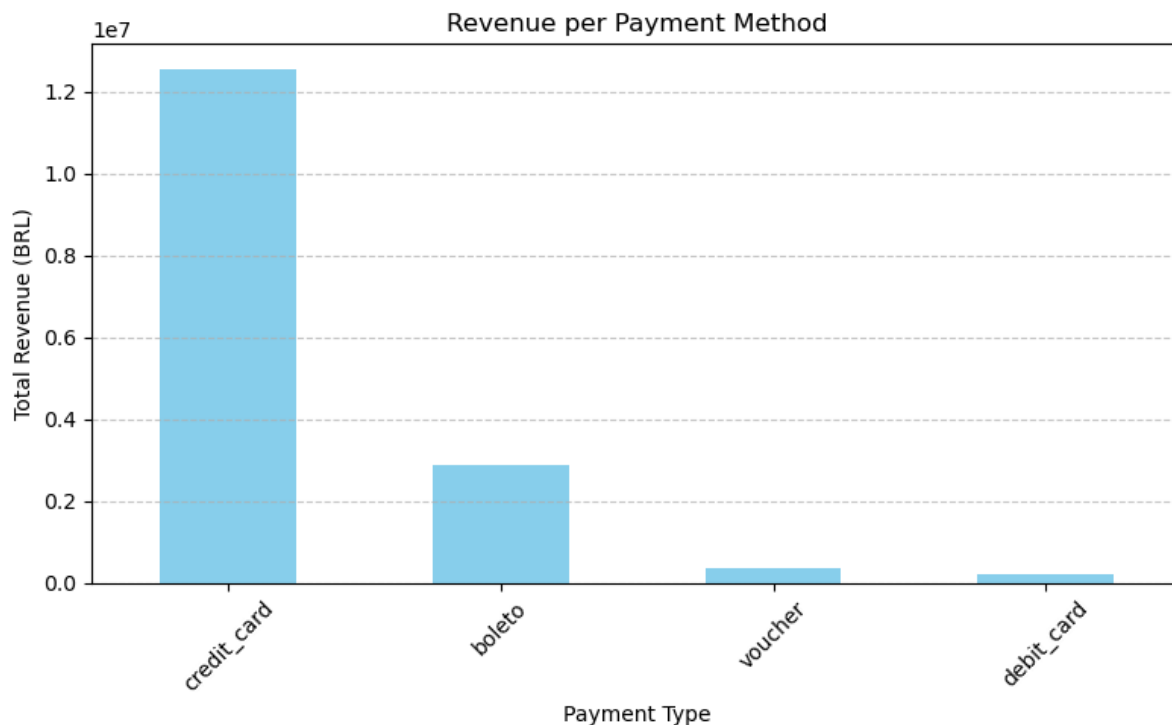
34. Revenue per Payment Method:

**(credit\_card 12542084.19)**

**(boleto 2869361.27)**

**(voucher 379436.87)**

**(debit\_card 217989.79)**



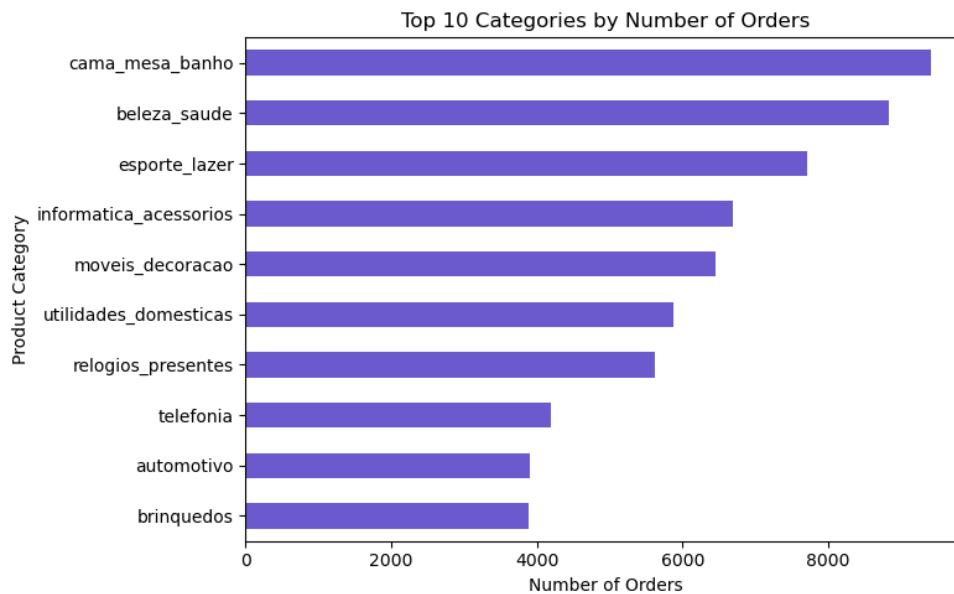
## ➤ Order & Product KPIs

35. Total Number of Orders:

**(Total Number of Orders: 99441)**

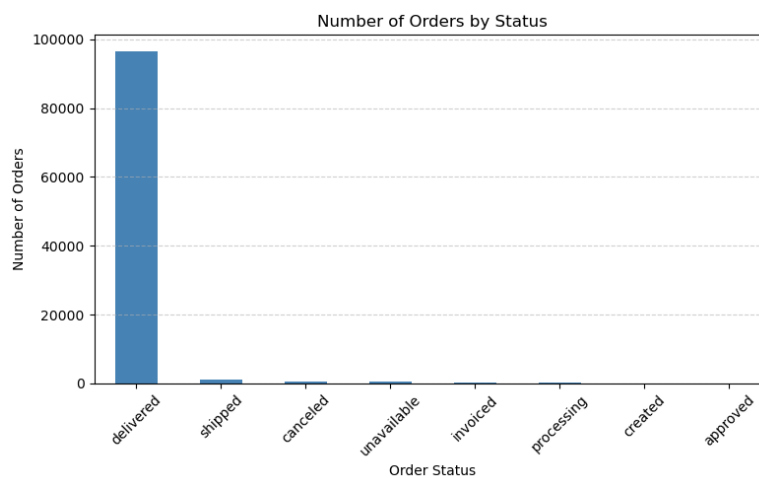
36. Number of Orders by Category:

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:f9312ec9-2561-4254-b2e0-8681bf1b9833>



37. Canceled Orders (Count of orders where order\_status = canceled):

**(Number of Canceled Orders: 625)**



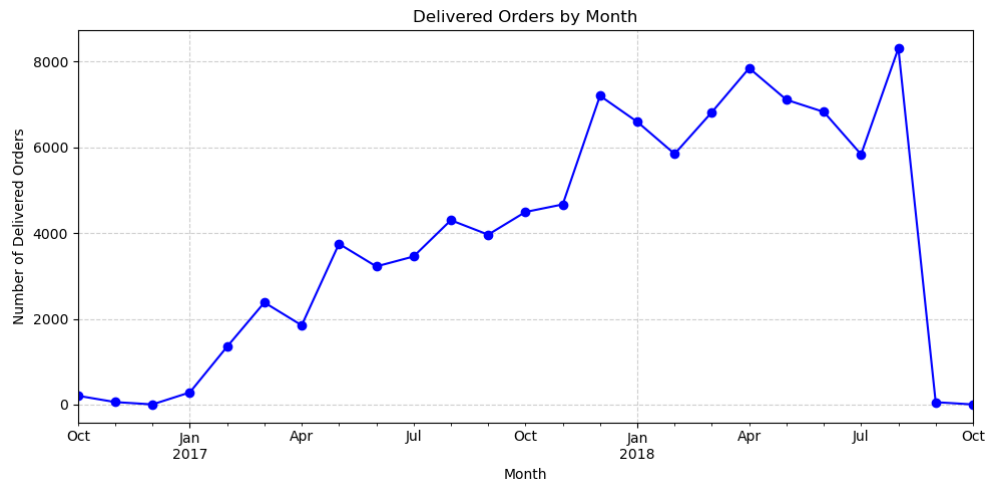


38. Pending Orders (order\_status = created or approved):

**(Number of Pending Orders: 7)**

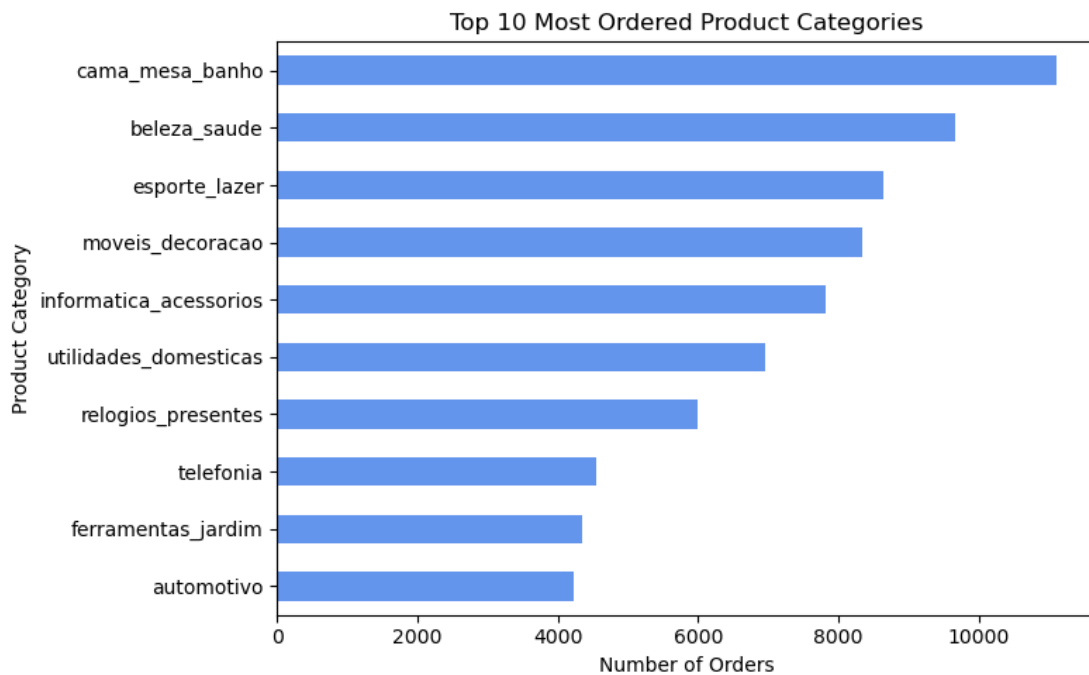
39. Delivered Orders by Month (Trend of successful fulfillment):

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:85aa905c-9252-4caf-afb0-c6cccf2e9855>



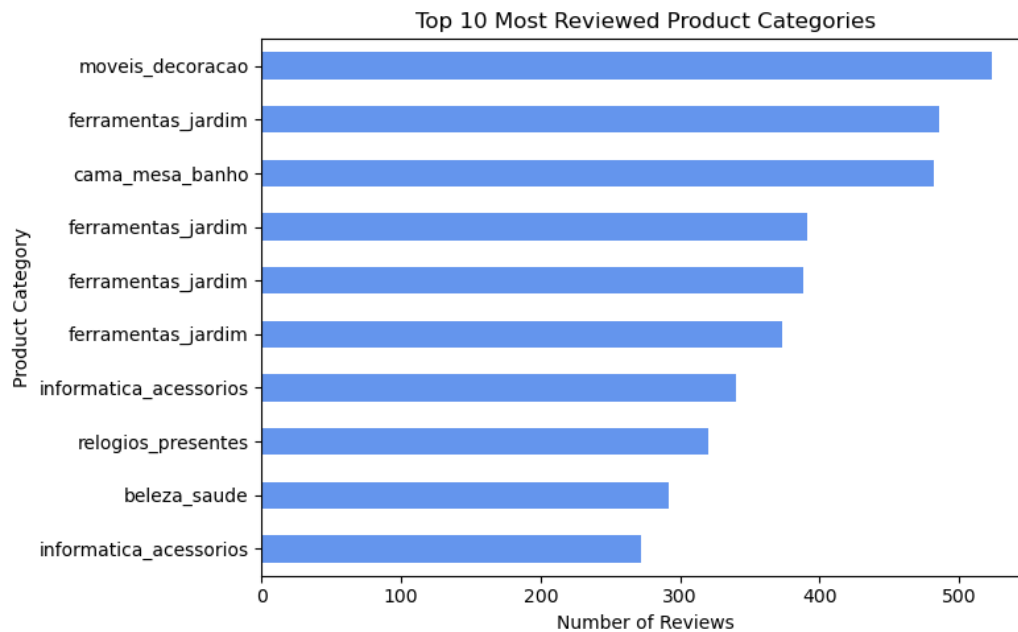
40. Top 10 Most Ordered Products:

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:19c9d8c4-3cb7-4d97-aaad-31ee051d78da>



#### 41. Top 10 Most Reviewed Products:

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:dfbbf6c2-2780-40f1-b941-f360246a0cf3>



#### 42. Orders with Product Return Risk (Based on low ratings):

**(Number of Orders with Product Return Risk: 18711)**

##### ➤ Operational KPIs

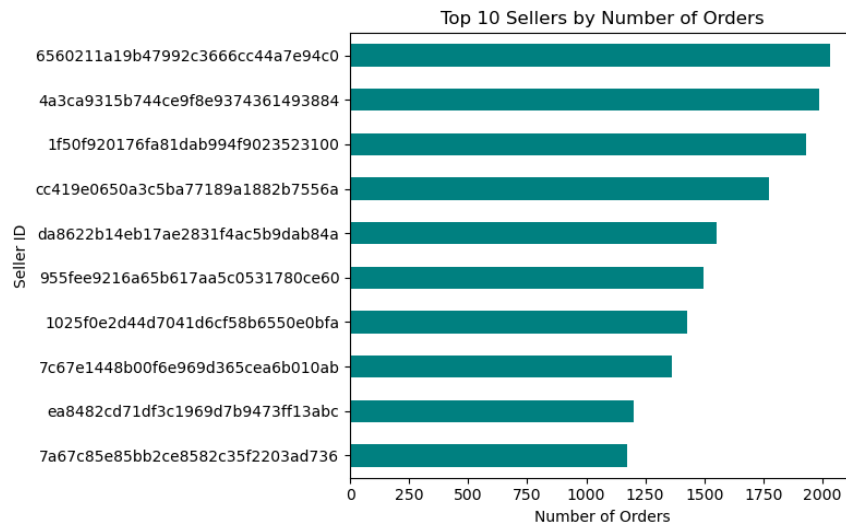
#### 43. Number of Sellers:

**(Number of Sellers: 3095)**

#### 44. Top Sellers by Revenue or Orders:

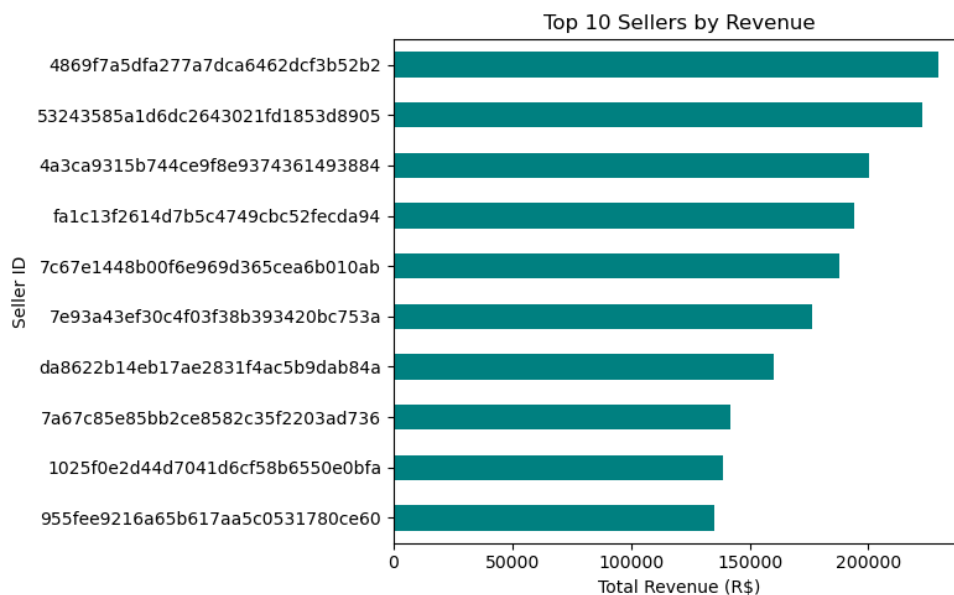
**by orders:**

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:bf141c05-b49f-4647-b8cb-a41adadb8924>



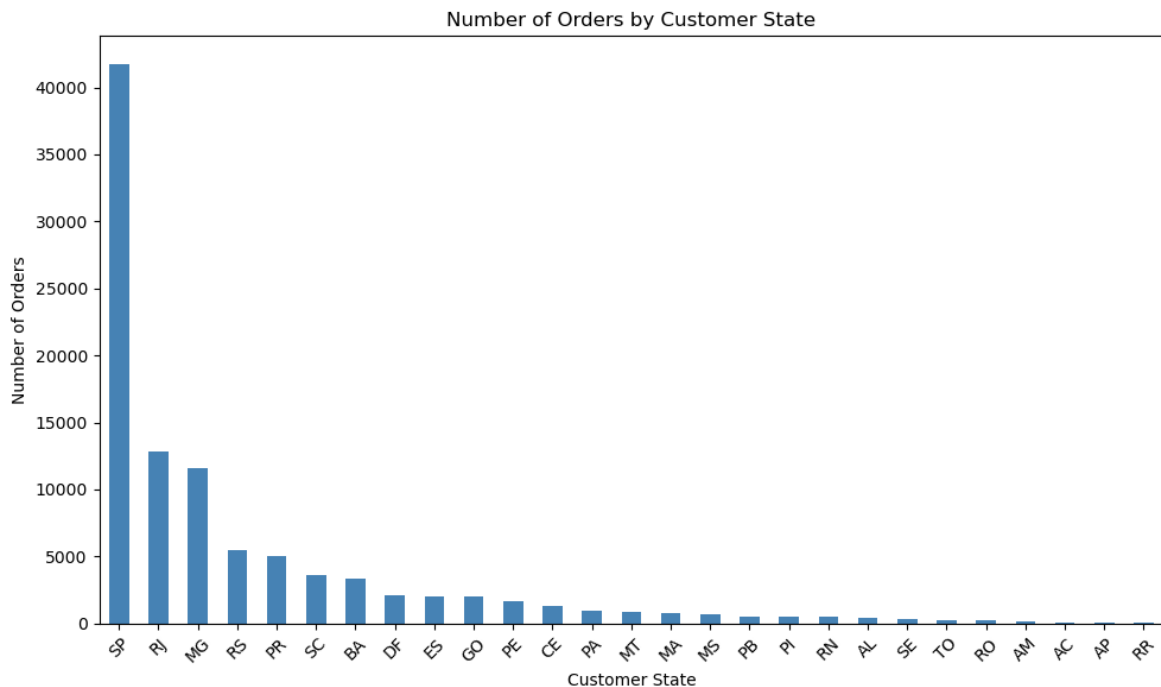
by revenue:

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:7c350928-77d5-48dd-82eb-11101df9b6b3>



45. Orders by Region/State (Based on seller or customer location):

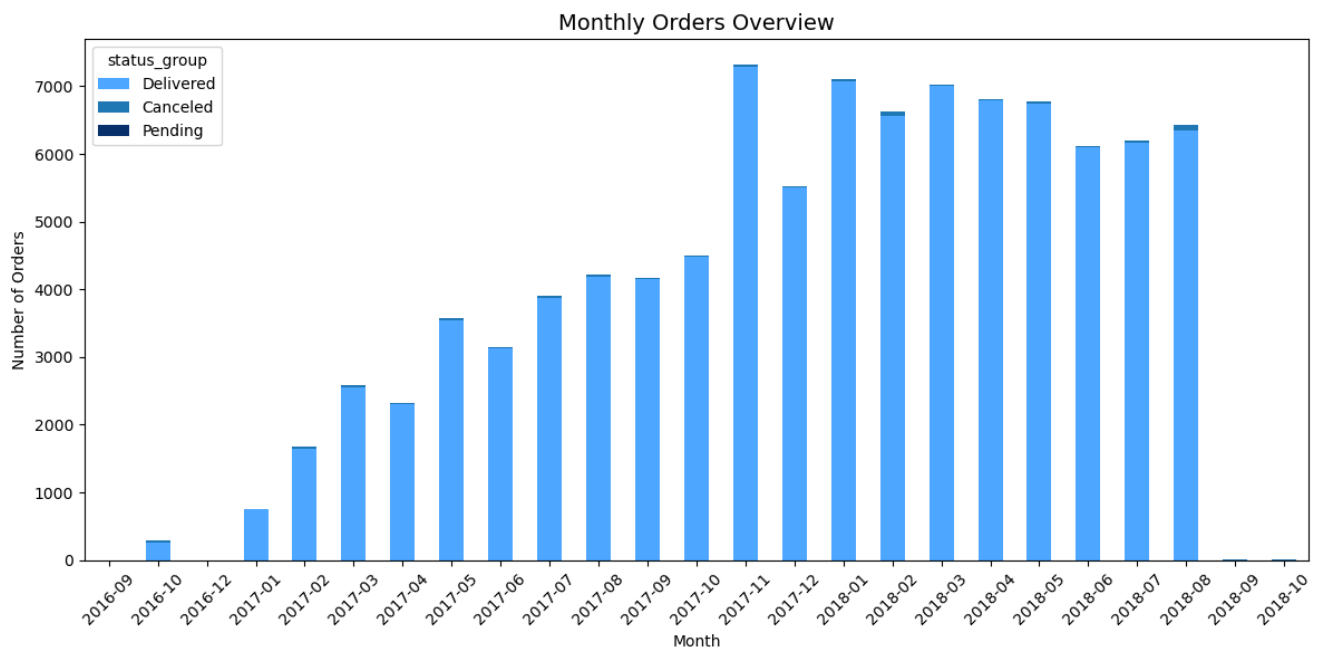
<https://acrobat.adobe.com/id/urn:aaid:sc:EU:34bc1144-05b3-4b77-a044-69c08c68538e>



### ➤ Bonus KPIs (Interactive Dashboard Related)

#### 46. Monthly Orders Overview (Total, Delivered, Canceled, Pending):

<https://acrobat.adobe.com/id/urn:aaid:sc:EU:2f056cd3-93f9-4f74-a324-2c2fb16142e2>



47. % Revenue Reconciliation  $((\text{Total Revenue} \div \text{Expected Revenue}) \times 100)$ :

**(Revenue Reconciliation %: 117.78%)**

48. Interactive Filters (Slicers for Order Status, Payment Type, Date):

[file:///C:/Users/Esraa/OneDrive/Desktop/final%20Project/cleaned\\_data/orders\\_by\\_month\\_status.html](file:///C:/Users/Esraa/OneDrive/Desktop/final%20Project/cleaned_data/orders_by_month_status.html)