Brazilian e-commerce online store

Sales Analysis

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Overview

The aim of this project is to visualize and enhance the performance of an online store sales in brazil .

By Bower BI software , The store data will be connected and analyzed , also DAX will be used like Month over Month change in revenue so that we can highlight the strengths of the store sales , this will help determining the suitable recommendation to reach the project's goal .

The store has 8 datasets related to the the orders approved through time period, customers , products ,product categories and order date , the data is connected in a snowflake schema as shown in the next slide

Data Model
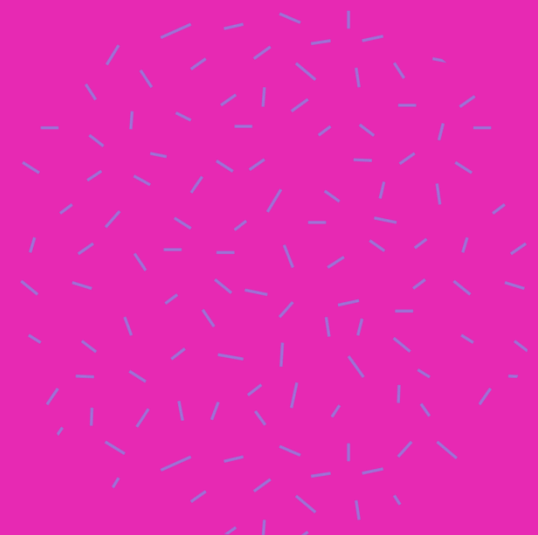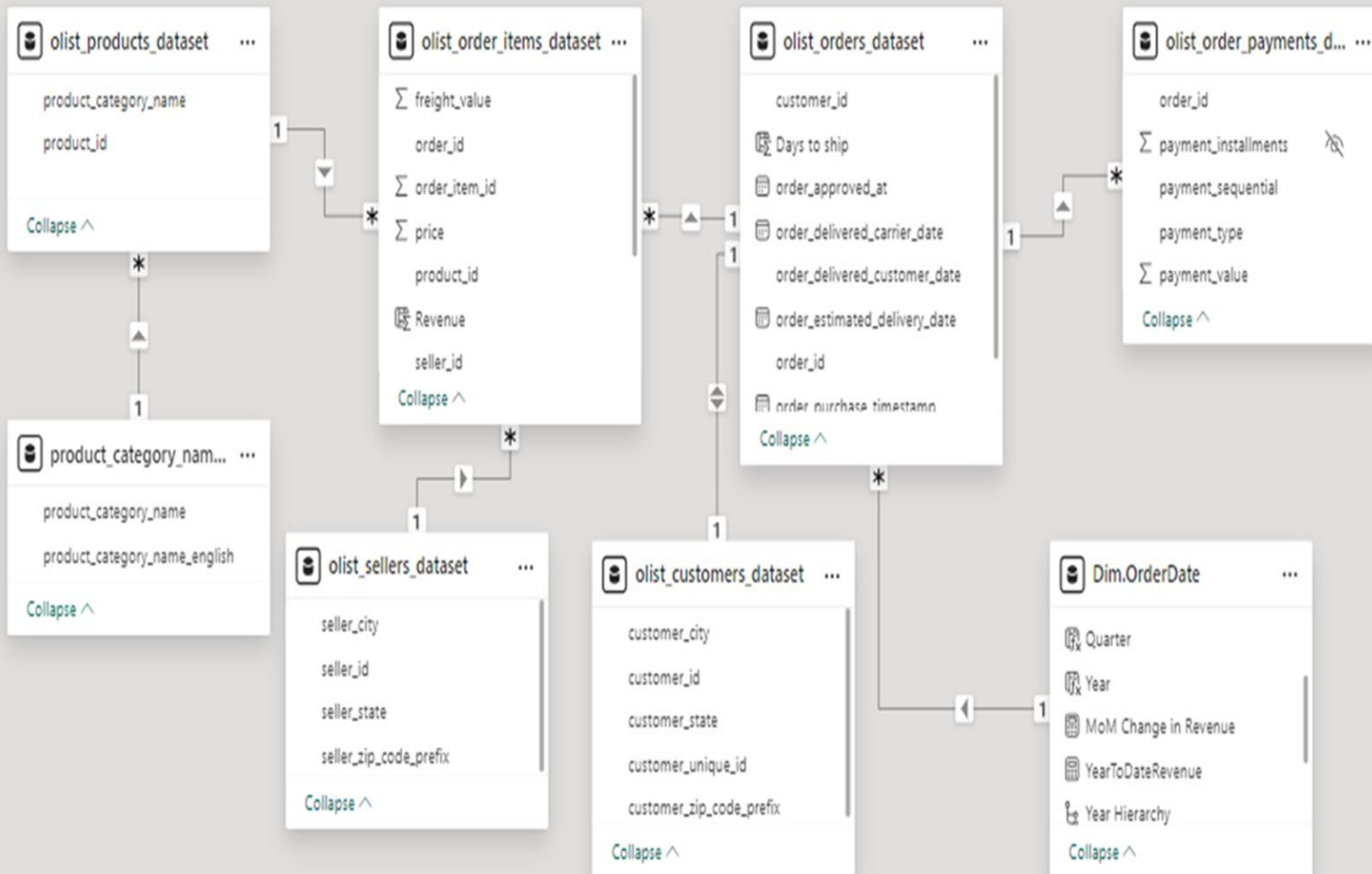
Data Description

The data columns used in the analysis is defined as follows:

Order items	Price	Friegt value
Customer state	Customer city	Seller id
Order id	Product Category	Shipping limit date
Payment type	Orderdelivered customer_date	Order approved at
	Product id	

Business Questions

Revenue

1. What's the total revenue and total quantity sold over years ?

2. What's the highest state and city in terms of revenue?

Product Categories

3. What are the top 10 products in terms of revenue and their order frequency?

4. What are the top 10 products in terms of order frequency?

5. What's the most popular payment type for customers?

Time Analysis

6. What's the Month over Month Change in revenue ?

7. What's the average days for orders to be delivered ?

8. Which months and quarters did the store approve highest number of orders ?

9. What's the year to date revenue ?

Online Store Sales Analysis
(Brazil)

Year

All

Notes :

In the overview page :

1. you will find the year 2018 has the highest revenue and total quantity sold .
2. It's clear that there is no information about sales in 2019 .
3. The global trend of revenue shows that revenue was very low in 2016 , but it increased through 2017 and 2018 .
4. Sau Paulo is the highest revenue generator city .

Navigation

Overview

Product Analysis

Time Analysis

18M	135K	99K
Total Revenue	Total Quantity	No. Customers
99K	73	3095
NO.Orders	No.ProductCategories	No. Sellers

Revenue and Quantity by year , quarter and month
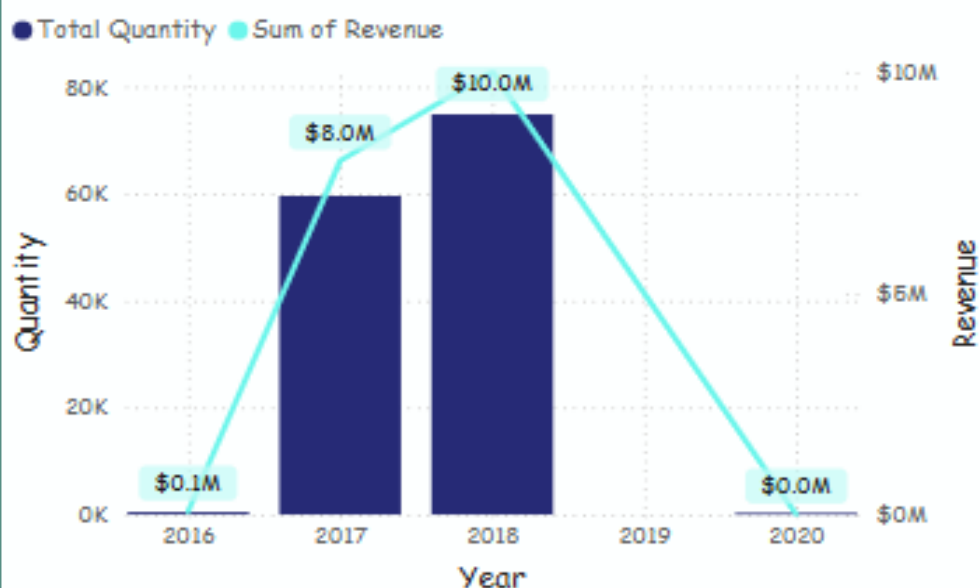
● Total Quantity ● Sum of Revenue

$10.0M
$8.0M
$0.1M
$0.0M

80K
60K
40K
20K
0K

Quantity

$10M
$8M
$6M
$0M

Revenue

2016 2017 2018 2019 2020

Year

💡 customer_state ✕   💡 customer_city ✕

SP

Sum of Revenue
$18,058,265.33

SP
$6,582,010.61

RJ
$2,371,889.64

MG
$2,049,451.28

RS
$985,171.89

sao paulo
$2,433,898.89

campinas
$236,098.02

guarulhos
$178,793.06

sao bernardo do campo
$132,071.34
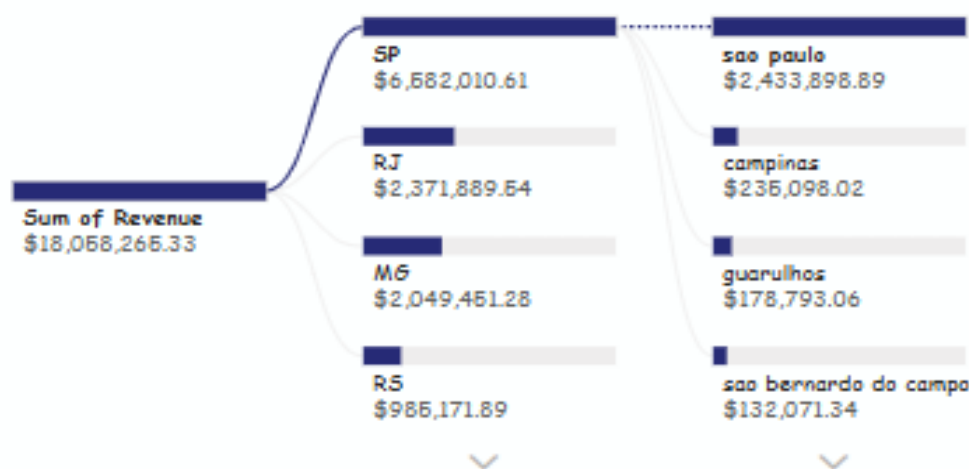
Overview | Product Analysis | Time Analysis | Tooltip for products | +

Product Analysis

Year
All

Product Category
All

City
All

Paymenttype by number of orders

99K (25%)   99K (25%)

99K (25%)   99K (25%)

payment_type
- boleto
- credit_ca...
- debit_card
- voucher
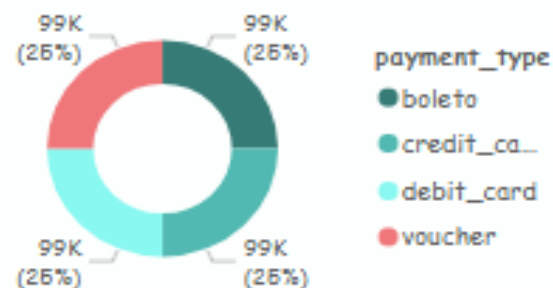
73
No.ProductCategories

33K
No.Products

Top 10 product categories in terms of Revenue and order frequency

● Sum of Revenue ● NO.Orders

Revenue and Order Fr...

$1.5M
$1.0M
$0.5M
$0.0M

9K 9K 6K 7K 8K 6K 6K 4K 4K 4K

health_beauty, bed_bath_table, watches_gifts, computers_accessories, sports_leisure, furniture_decor, housewares, auto, cool_stuff, garden_tools

Product_Category

Top 10 product categories in terms of order frequency

bed_bath_table	computers_a...	furniture_d...	housewares
9.42K	6.69K	6.45K	5.88K

health_beauty	watches_gifts	auto	toys
8.84K	5.62K		

sports_leisure	telephony	3.90K	3.89K
7.72K	4.20K		

Overview | Product Analysis | Time Analysis | Tooltip for products | +
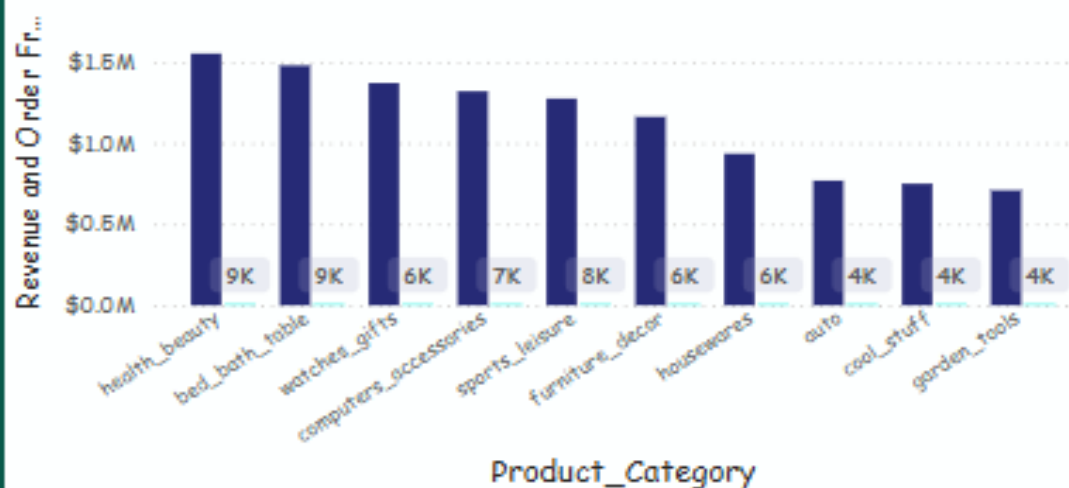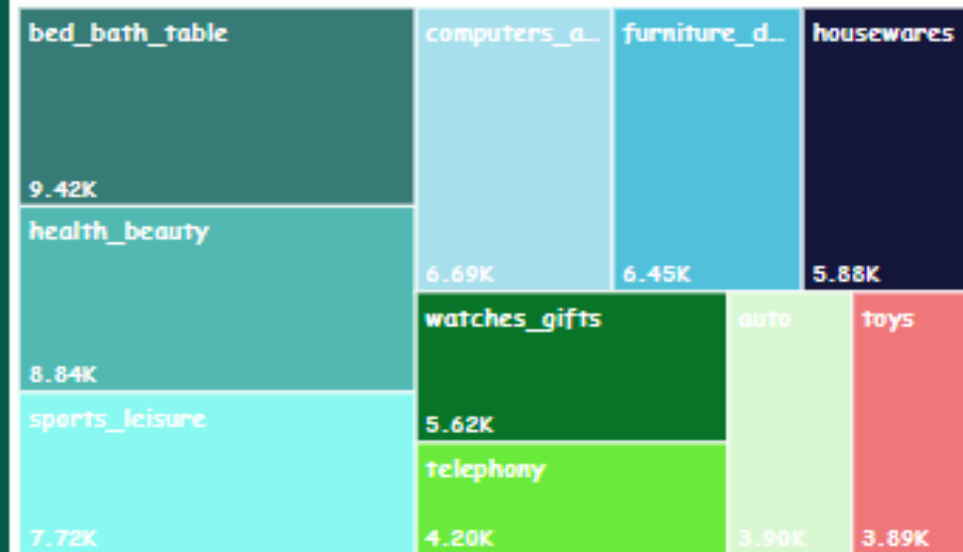
Time Analysis

Navigation

Overview

Product Analysis

Time Analysis

Year
All

Quarter
All

Month
All

18.06M	$10.44M
Total Revenue	YearToDateRevenue
2.72%	12
MoM Change in Revenue	Avg. days_to_deliver
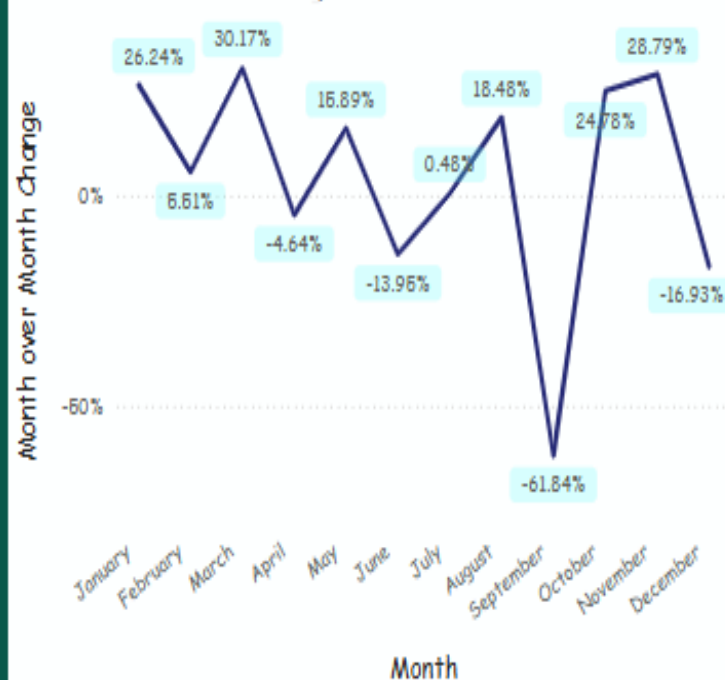
Notes :

In time analysis page :

1. September has the lowest change in revenue since it decreased by 62% compared to August.
2. The highest increase in revenue happened in March since it increased by 30% .
3. The maximum numbers of orders are shown to be in days of the months : April , May ,June July and August , which means that the high number of orders are approved in the second quarter .

Month over Month Change in Revenue

26.24% 30.17% 16.89% 18.48% 24.78% 28.79%
0% 6.61% 0.48% -4.64% -13.96% -16.93%
-60% -61.84%

Month over Month Change vs Month (January, February, March, April, May, June, July, August, September, October, November, December)

Map for number of orders by month and day

Day	January	February	March	April	May	June	July	August	September	O
1	1	284	322	20	65	355	31	470	161	
2	44	328	363	369	483	241	161	453	35	
3	318	152	170	507	524	64	563	482	16	
4	295	32	35	480	462	339	407	261	189	
5	265	291	330	479	245	489	364	46	170	
6	94	359	351	398	44	476	385	345	170	
7	26	308	364	267	392	462	200	527	6	
8	306	313	349	49	496	466	33	492	185	
9	327	292	340	362	503	207	208	506	41	
10	279	150	192	487	503	47	461	515	6	
11	260	28	73	525	501	296	474	283	234	
12	172	7	202	454	255	422	412	45	195	
13	146	100	373	461	45	407	416	445	209	
14	12	440	403	118	436	434	220	556	177	
15	228	401	343	45	569	314	29	534	170	
16	302	410	388	335	550	243	60	528	46	

Data

Search

- Dim.OrderDate
- NeededMeasures
- olist_customers_dataset
- olist_order_items_data...
- olist_order_payments_...
- olist_orders_dataset
- olist_products_dataset
- olist_sellers_dataset
- product_category_na...

Visualizations

Filters

Recommendations

 1. Availability of fast and interactive communication methods with customers to keep customer loyalty and improve the sales performance of the store .

2. the most popular product categories – specially bed, bath and health, beauty products – among customers should be a part of the .

3. Providing marketing campaigns specially in SauPaulo city to attract larger number of customers .

4. Announcement for offers is better to be in the time period from April to August to increase order volume and revenue .