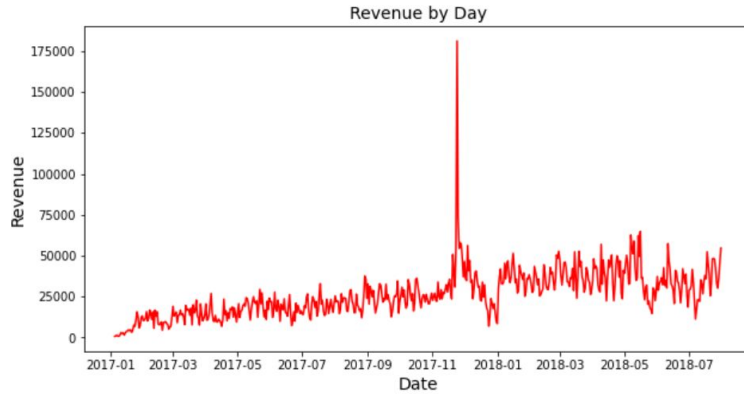


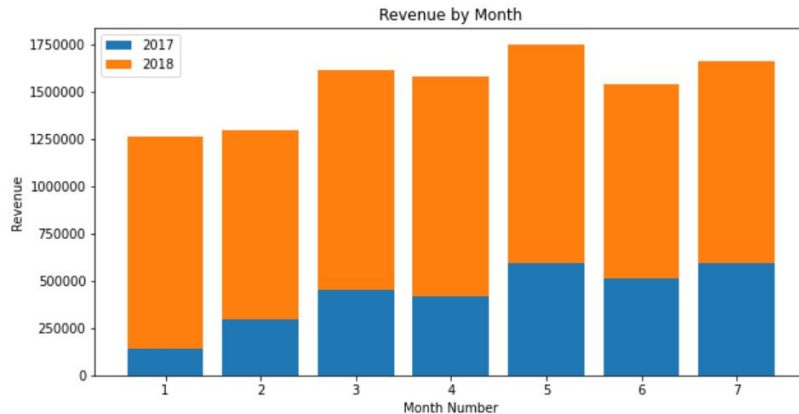
Agenda

1. Revenue Breakdown
2. Volume Breakdown
3. Customer Satisfaction
4. Customer Segmentation
5. Top Selling Category
6. Improvement

Revenue Breakdown

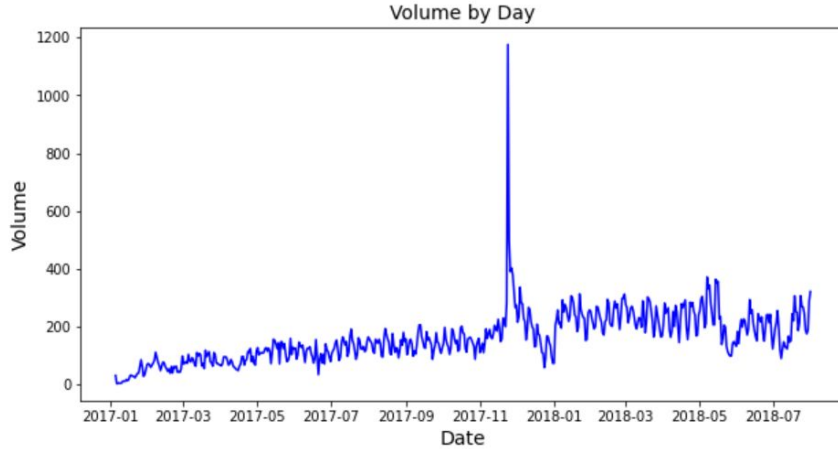


1. The line charts how that the business has a consistently increasing revenue. This is a sign that the company has good financial health.
2. The spike in sales in 2017 December may be due to Christmas.

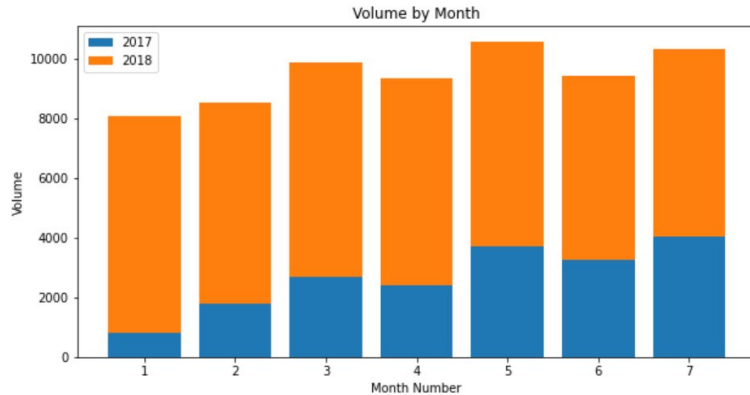


1. The stacked bar graph show that's every single month in 2018 had higher revenue than in 2017.

Volume Breakdown



1. The revenue charts and the sales volume chart both tell the same story.



Customer Satisfaction

		Mean	Median	Count	Standard_Deviation
order_purchase_year	order_purchase_month				
2017	1	4.063291	5.0	790	1.376443
	2	4.016403	5.0	1768	1.389288
	3	4.075911	5.0	2661	1.339491
	4	4.046921	5.0	2387	1.345064
	5	4.143753	5.0	3666	1.285796
	6	4.146053	5.0	3218	1.288788
	7	4.176441	5.0	3990	1.258293
	8	4.238250	5.0	4298	1.229915
	9	4.187250	5.0	4251	1.266301
	10	4.124973	5.0	4593	1.306499
	11	3.910027	5.0	7480	1.456525
	12	4.019066	5.0	5612	1.386530
2018	1	4.041105	5.0	7201	1.372843
	2	3.827188	5.0	6672	1.502795
	3	3.753078	4.0	7148	1.543873
	4	4.163591	5.0	6883	1.283646
	5	4.193888	5.0	6839	1.262950
	6	4.277479	5.0	6141	1.205928
	7	4.263166	5.0	6247	1.231807

1. The review score is skewed to the left(Median > Mean) which means that most reviews are on the right side (positive)
2. The average customer rating is around 4, and it has been gradually rising over time.

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Customer Segmentation

Amount Spend

Total_Amount_Spend	
Percentile	
0.10	40.1700
0.20	55.5040
0.30	70.2500
0.40	87.6700
0.50	108.3000
0.60	133.6120
0.70	163.9200
0.80	211.1160
0.90	321.8200
0.99	1127.4958
1.00	13664.0800

Product Type

Count	
most_frequent_product_type	
bed_bath_table	8521
health_beauty	7744
sports_leisure	6861
computers_accessories	6121
furniture_decor	5699
housewares	5051
watches_gifts	5002
telephony	3801
toys	3528
auto	3485
cool_stuff	3408
garden_tools	3246
perfumery	2810
baby	2622
electronics	2399
stationery	2067
fashion_bags_accessories	1630
pet_shop	1465
office_furniture	1196

State

customer_state	Count
SP	39440
RJ	12351
MG	11161
RS	5273
PR	4796
SC	3496
BA	3293
DF	2038
ES	1977
GO	1945
PE	1587
CE	1292

Amount Spend

1. We can segregate the customer by total spent amount. (percentile)

Product Type

1. We can group customers according to the most popular product category they purchase.

State

1. We can group customers according to their home state

Top Selling Product Category

Top 10 Product Category

Revenue Generated	
product_category_name_english	
watches_gifts	1108425.95
health_beauty	1086022.21
bed_bath_table	886436.74
sports_leisure	873299.07
computers_accessories	763095.86
cool_stuff	603920.01
furniture_decor	582113.96
auto	516539.54
housewares	514518.37
toys	450653.84

Bottom 10 Product Category

Revenue Generated	
product_category_name_english	
fashio_female_clothing	2333.94
fashion_sport	1929.91
la_cuisine	1914.99
flowers	962.94
arts_and_craftmanship	912.25
diapers_and_hygiene	887.80
home_comfort_2	682.87
cds_dvds_musicals	640.00
fashion_childrens_clothes	569.85
security_and_services	283.29

1. Based on revenue generated, these are the top 10 and bottom 10 product categories.

Improvement

Number of Item Per order

Count	
Number of Item Per Order	
1	89570
2	2657
3	280
4	59
5	3
6	9
7	2

The data shows that the majority of customers only purchase 1-2 things per order. We can build a recommendation system that would offer recommendation for related products during the buyer checkout process.