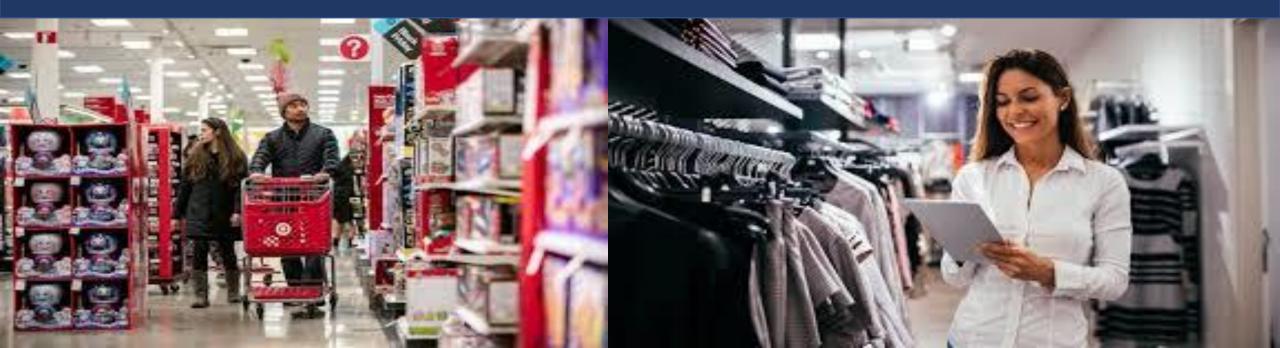
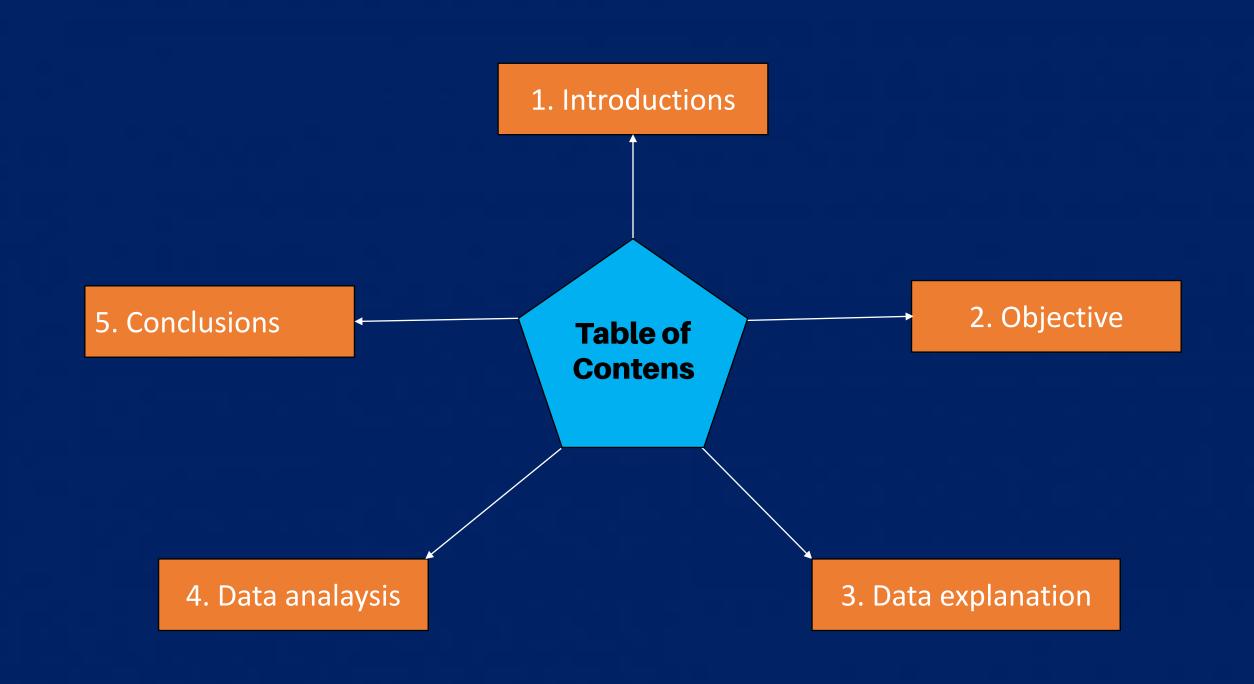


Sales Data Analysis in Several Countries 2018 - 2019





Introductions



- The dataset used is sales data from 12-01-2018 to 12-09-2019.
- This data consists of 3753 products from 38 countries in the world.
- Such as England, Germany, France,
 Australia, Switzerland, the Netherlands
 and Saudi Arabia.

Objective



- ❖ Know what happened to sales in 2018 to 2019.
- As a basis for determining strategies to increase sales in the coming year.
- Know the products that are in high demand by buyers

Data Explanation



- ✓ Distribution of top contributing products
- ✓ Analyze buyers with the highest and lowest orders
- ✓ Analyze the products that are most in demand
- ✓ Analyzing total sales revenue
- ✓ Analysis of market basket size
- ✓ Cohort analysis

Data Analysis

Category Products

Category (transaction volume)

Populer 527.765

Category (Total revenues)

Populer 423.443

Low 104.322

Final Segmentation

Super Populer 423.443

Low 104.322

Count Category

-Populer : <20%

-Normal: 20% - 80%

-Low:>80%

Final Segmentation

Transaction volume: Total revenues

-Populer : Populer = Super Populer

-Populer : Normal = Populer

-Low : Low = Low

5 Top Customer

17841	7835
14911	5580
14096	5093
12748	4584
14606	2692

5 Low Customer

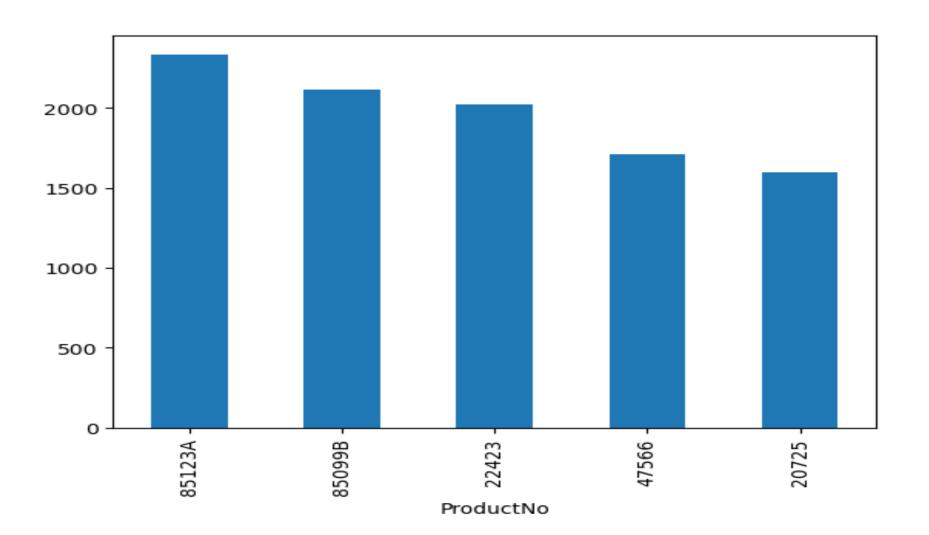
1
1
1
1
1

.

Top and Low Product 2019

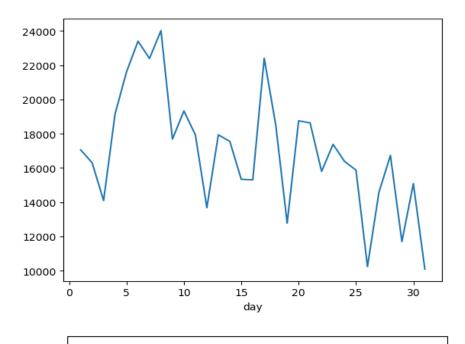


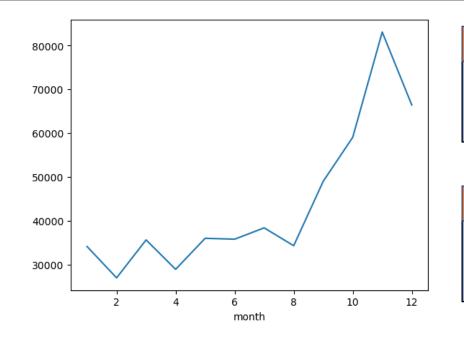
5 Low Product



ProductNo	
90162A	1
848565	1
84854	1
90178B	1
20678	1

Total Revenue 2019





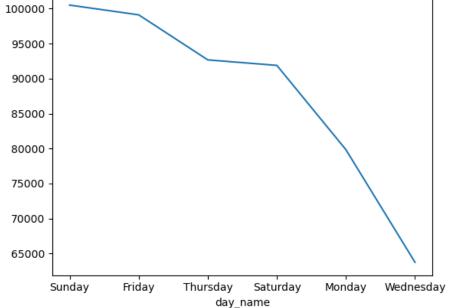
Day

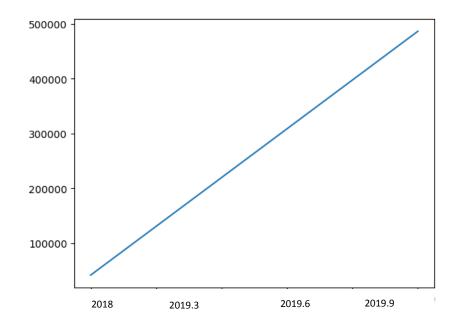
-Highest: 8 -Lowest: 31

Weekly

-Highest : Sunday

-Lowest: Wednesday





Monthly

-Highest: 11

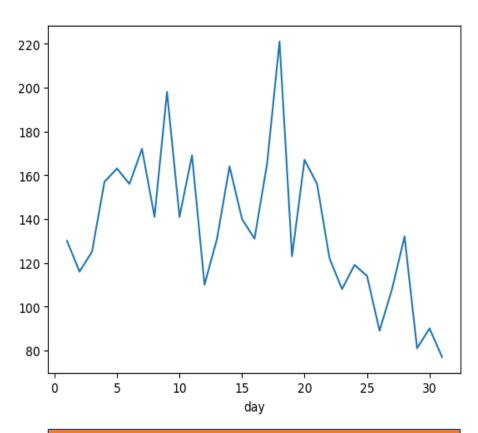
-Lowest: 2

Yearly

From 2018 to 2029, total revenue increasingly rising

Market Basket Size

Average Per Day



Per Day

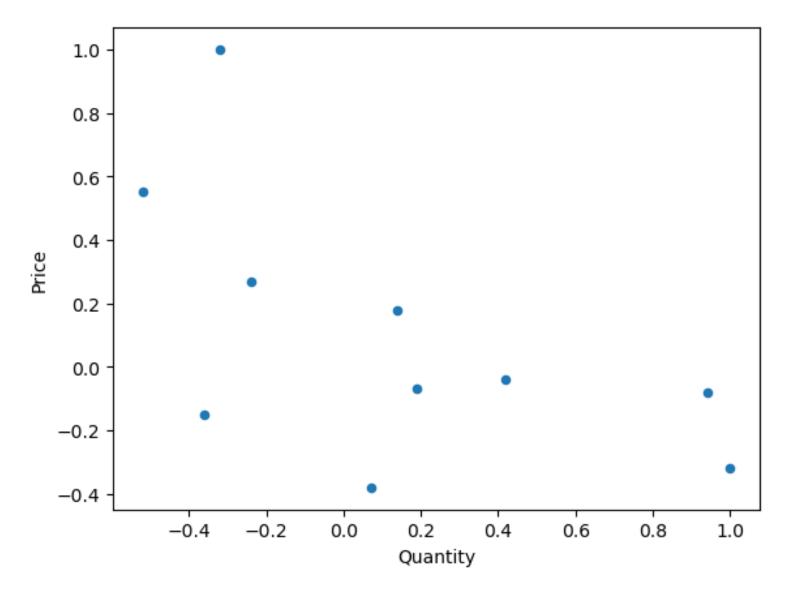
-Highest : 18 -Lowest : 31

Average Per Country

Country

United Kingdom	3441.3	Singapore	5.0
Netherlands	147.3	Israel	4.2
EIRE	117.9	Iceland	3.1
Germany	108.6	USA	2.6
France	104.8	Unspecified	2.2
Australia	80.2	Canada	1.8
Switzerland	28.7	Hong Kong	1.7
Sweden	23.9	Poland	1.6
Japan	23.0	Malta	0.8
Spain	22.4	United Arab Emirates	0.8
Belgium	21.8	Greece	0.7
Norway	15.1	Czech Republic	0.6
Portugal	13.9	Lithuania	0.5
Finland	9.7	European Community	0.4
Denmark	8.1	Lebanon	0.4
Channel Islands	6.4	Brazil	0.4
Italy	6.1	RSA	0.3
Austria	5.5	Bahrain	0.3
Cyprus	5.0	Saudi Arabia	0.1

Price Elasticity



Name Product	Quantity (>5)	Price Change (%)
23378	24	-0.04
22745	6	-0.07
23344	10	-0.50
23162	8	0.10
22918	12	0.00

Name Product	Quantity (<5)	Price Change (%)
85034B	1	0.15
22701	2	0.00
22625	2	0.53
47590A	3	0.23
84029G	4	-0.06

Note

-Price increases: The number of

orders decreases

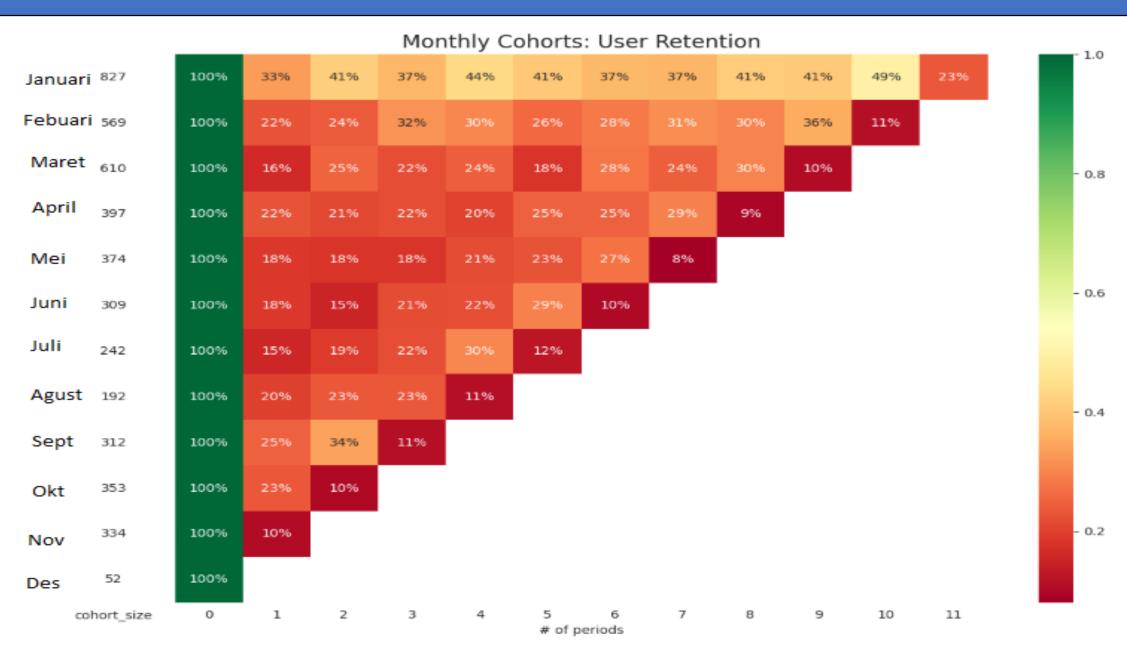
-Price decreases: The number of

orders increases

Count Customers Cohort Analysis

kohort_bulan	0	1	2	3	4	5	6	7	8	9	10	11
cohort												
2019-01	827.0	277.0	343.0	309.0	361.0	336.0	310.0	305.0	341.0	337.0	409.0	194.0
2019-02	569.0	128.0	134.0	182.0	171.0	146.0	161.0	178.0	170.0	202.0	64.0	NaN
2019-03	610.0	98.0	153.0	134.0	148.0	109.0	168.0	149.0	182.0	64.0	NaN	NaN
2019-04	397.0	89.0	82.0	87.0	80.0	98.0	98.0	117.0	37.0	NaN	NaN	NaN
2019-05	374.0	69.0	67.0	67.0	80.0	85.0	102.0	30.0	NaN	NaN	NaN	NaN
2019-06	309.0	57.0	46.0	66.0	67.0	91.0	31.0	NaN	NaN	NaN	NaN	NaN
2019-07	242.0	37.0	46.0	53.0	73.0	29.0	NaN	NaN	NaN	NaN	NaN	NaN
2019-08	192.0	38.0	45.0	45.0	21.0	NaN						
2019-09	312.0	77.0	106.0	35.0	NaN							
2019-10	353.0	82.0	35.0	NaN								
2019-11	334.0	34.0	NaN									
2019-12	52.0	NaN										

Percentage Customers Cohort Analysis



Conclusions

- Most popular products 85123A
- Highest total revenue
 - -Day: 8
 - -Weekly: Sunday
 - -Month: 11
 - -Yearly: 2018 to 2019 increasing
- The highest basketball size
 - -Average per day: 18
 - -Average per country: United Kingdom
- Price elasticity
 Prices increase (quantity of product purchases decreases)
- Highest retention January 2019

Recommendation

Total Population in 2019						
5 Top Country	5 Lowest Country					
-United Kingdom: 66.84 million -Netherlands: 17,34 million -Eire: 4,934 million -Germany: 83,09 million -France: 67,39 million	-Saudi Arabia : 35.83 million -Bahrain : 1.494 million -Brazil : 211.8 million -Lebanon : 5.782 million -Lithuania : 2.794 million					

- Focusing sales in the 5 countries that have the most basket sizes, such as the United Kingdom, Netherlands, EIRE, Germany and France.
- Increasing product prices will reduce the number of product sales, so if you want to increase the price of goods, it must be adjusted to the country's objectives, because the purchasing power and per capita income of the population of each country is different.

