



Individual Assignment

SQL

The Look Commerce

Week 4&5, January 2023

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SQL Assignment

This assignment is a continuation of the intermediate assignment to understand of more complex analysis in SQL





Brief

As you already give the overall picture of current business performance with deep dive analysis. However, the company is in the optimization mode caused by the potential crisis in 2023. The management has decided to cut off resources in some categories with the lowest growth in the past 1 year. On another side, they want to continue the analysis by understanding the retention behaviors of the users and how to increase the retention rate

Important thing :

1. What is the purpose of this request?
2. Business Question
3. Data Understanding

Problems Ticket

Request Purpose :

Findings the categories with the lowest business growth (profit & revenue) in the past 1 year

Business Question :

- What is categories with the lowest revenue growth in past 1 year?
- What is categories with the lowestprofit growth in past 1 year?
- What categories need to be deprioritized



Problems Ticket

Request Purpose :

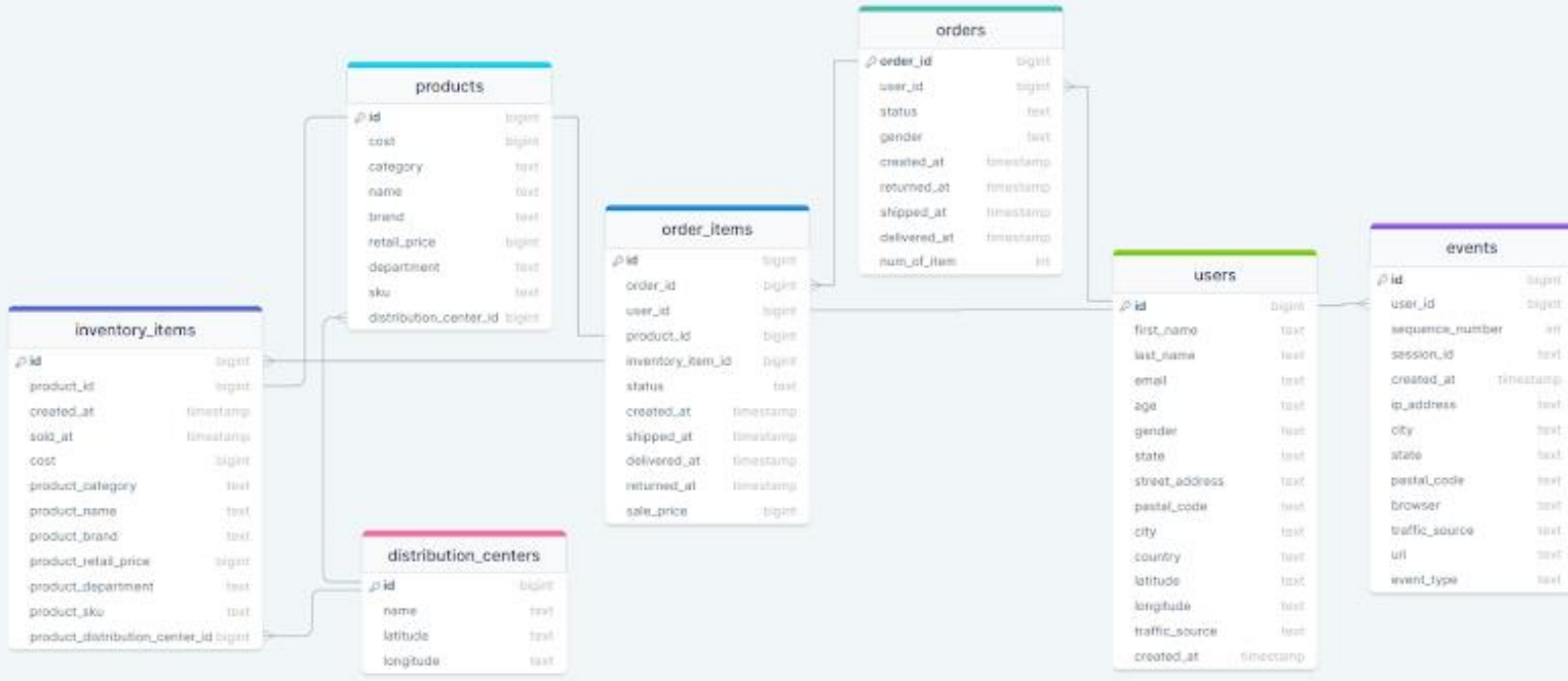
Find the categories with the lowest business growth (revenue and profit) in the past 1 year.

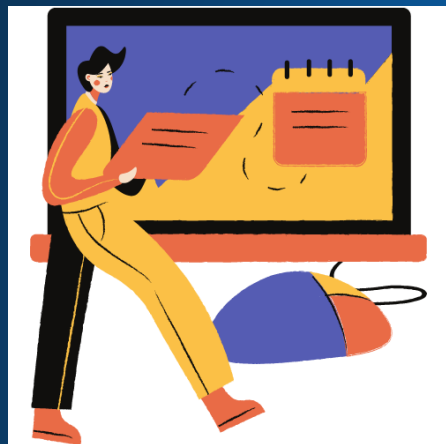
Business Question :

- What is categories with the lowest revenue growth in past 1 year?
- What is categories with the lowest profit growth in past 1 year?
- What categories need to be deprioritized?



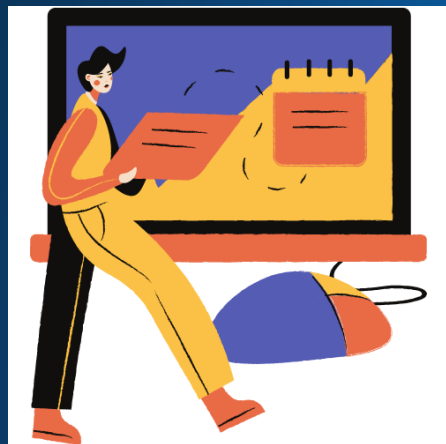
Entity Relationship Diagram



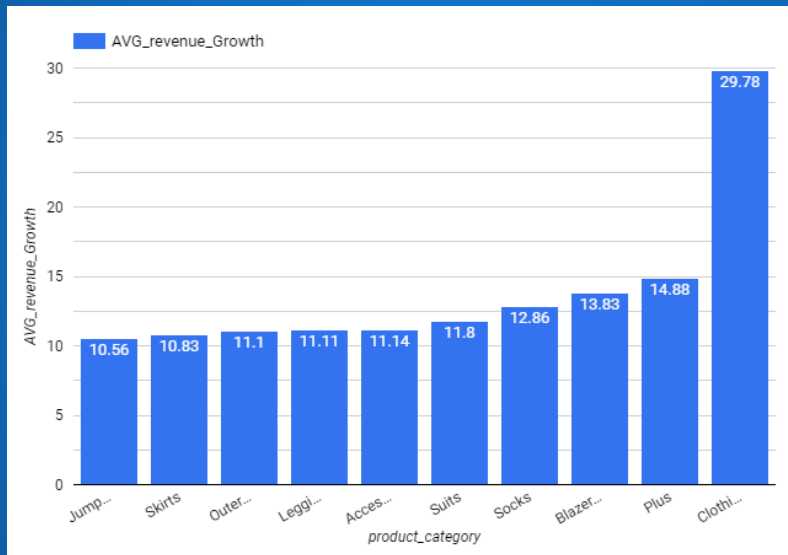


What is categories with lowest revenue growth in past 1 year

```
1 WITH Observ1 AS
2 (
3     SELECT EXTRACT(MONTH FROM DATE_TRUNC(ord_items.created_at, MONTH)) AS month,
4           product_category,
5           SUM (sale_price-cost) as Profit,
6           SUM (sale_price) as Revenue
7     FROM `sql-project-376612.thelook_ecommerce.order_items` ord_items
8     INNER JOIN `sql-project-376612.thelook_ecommerce.inventory_items` inv_items
9     ON ord_items.inventory_item_id = inv_items.id
10    WHERE DATE (ord_items.created_at) BETWEEN '2022-01-01' AND '2022-12-31'
11    GROUP BY 1,2
12    ORDER BY 1,2
13 )
14
15 ,Growth AS
16 (
17     SELECT Observ1.month,
18           product_category,
19           Profit,
20           Revenue,
21           Profit/LAG (profit) OVER (PARTITION BY product_category ORDER BY month) -1 as profit_growth,
22           Revenue/LAG (Revenue) OVER (PARTITION BY product_category ORDER BY month) -1 as revenue_growth
23 FROM Observ1
24 )
25 SELECT DISTINCT product_category,|
26                AVG (Growth.profit_growth) OVER (PARTITION BY product_category)*100 as AVG_profit_Growth,
27                AVG (Growth.revenue_growth) OVER (PARTITION BY product_category)*100 as AVG_revenue_Growth
28 FROM Growth
29 ORDER BY 2,3 ASC
```

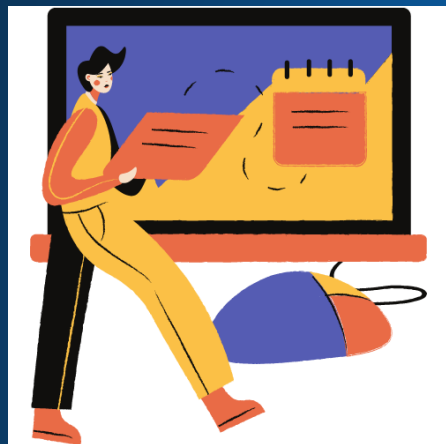


What is categories with lowest revenue growth in past 1 year



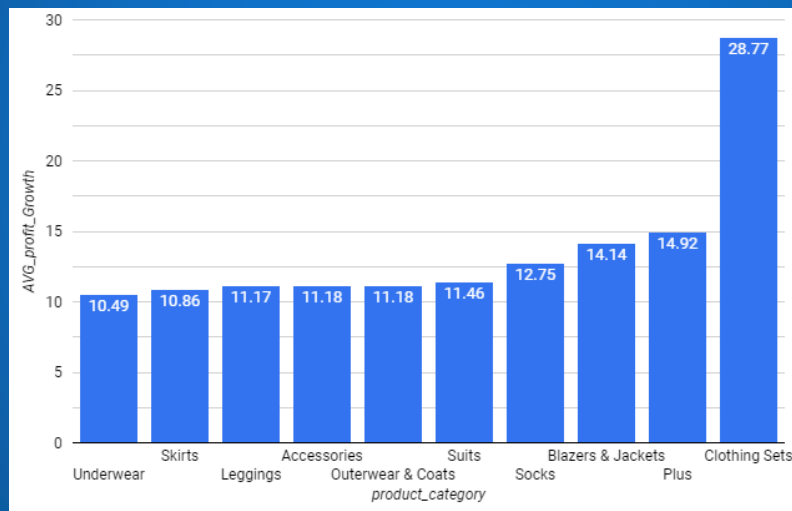
This is the top 5 product category based on average profit growth and we only focused on clothing sets, plus, blazers & jackets, socks and suits

*this profit is monthly-year based



What is categories with lowest profit growth in past 1 year

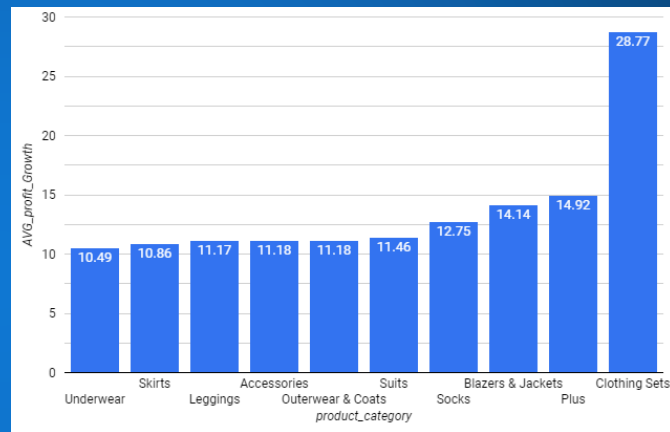
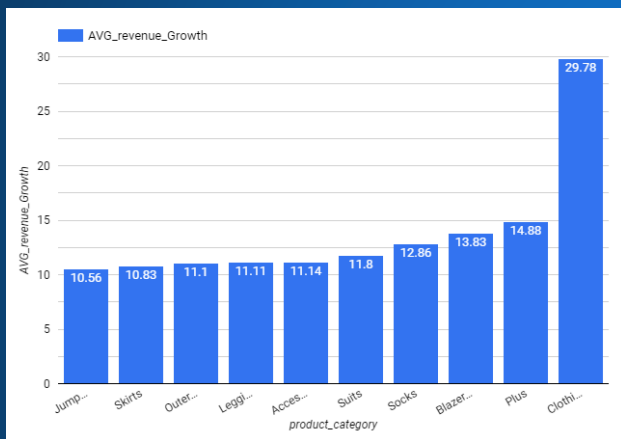
Top 5 Category Based on Average Profit Growth



As we can see from this chart, Underwear, Skirts, Leggings, Accessories and Outwear & Coat is the top 5 Bottom average revenue

*this profit is monthly-year based

What is Category Need to be Deprioritized



As we can see from both chart, we can deprioritized category at the bottom of each chart which is Jumpsuit & Rompers and Underwear.



Reccommendation

The company is need to keep supply in top 5 category in both charts and create prediction for demand best seller category. We also can communicate with BCG Matrix to draw market strategy, segmenting, targeting and positioning

Reccomendation



By the matrix, the company can put the category in each classification to communicate to customer

- Stars : product that have high market share in rapidly growing market
- Cows : product that have a high market share in a slow-growing market
- Question marks : product that have a low market share in a rapidly growing market
- Ape : product that have a low market share in a slow growing market



Thankyou for your attention

Merci pour votre attention

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