8/9/2024

Assignment 03 - E-commerce SQL Analysis

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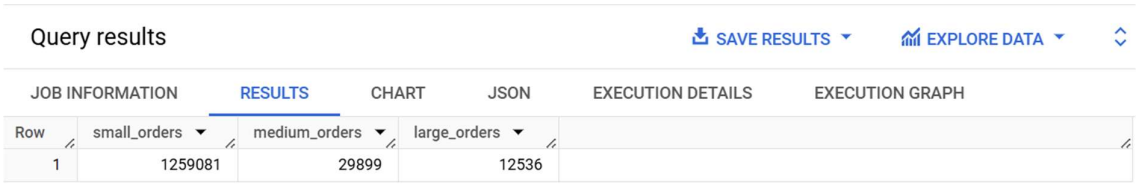
Question 1: Find the number of orders that have small, medium or large order value (small:0-10 dollars, medium:10-20 dollars, large:20+)

Answer –

Query –

```
SELECT
  COUNT(CASE WHEN SALES_VALUE BETWEEN 0 AND 10 THEN 1 END) AS small_orders,
  COUNT(CASE WHEN SALES_VALUE BETWEEN 10 AND 20 THEN 1 END) AS medium_orders,
  COUNT(CASE WHEN SALES_VALUE > 20 THEN 1 END) AS large_orders
FROM
  `transaction_data.transaction_data`;
```



Row	small_orders	medium_orders	large_orders
1	1259081	29899	12536

Insights –

Results Overview:

- Small Orders (0-10 dollars): 1,259,081 orders
- Medium Orders (10-20 dollars): 29,899 orders
- Large Orders (20+ dollars): 12,536 orders

Insights:

1. High Volume of Small Orders:
    - The majority of the orders fall into the "Small Orders" category, with over 1.25 million transactions. This suggests that a significant portion of customers are making low-value purchases.
    - The high number of small orders could indicate that customers are frequently buying inexpensive items or that they prefer making multiple small purchases rather than larger ones.
2. Low Volume of Large Orders:
    - There are only 12,536 orders classified as "Large Orders" (20+ dollars), which is a small fraction compared to the total number of transactions.

- This could indicate that customers are either hesitant to make large purchases or that the product offerings and pricing structure do not encourage high-value transactions.

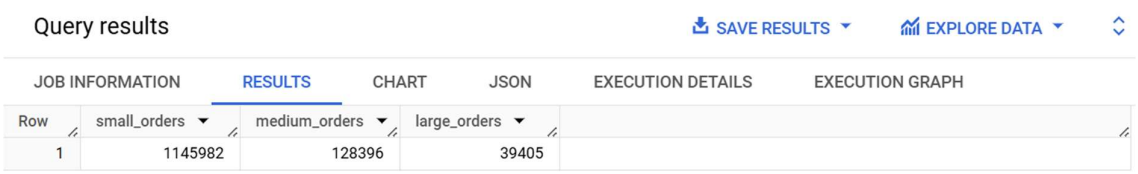
3. Medium Orders:
    - Medium orders account for 29,899 transactions, which is a middle ground between the small and large order categories.
    - This suggests there is a smaller but still notable group of customers who make mid-range purchases, likely indicating a target demographic for upselling strategies.
4. Potential Business Implications:
    - Marketing and Promotions: The business could benefit from creating marketing campaigns that encourage customers to increase their average order value, perhaps through bundle deals or discounts on larger purchases.
    - Product Offering Strategy: The company could evaluate its product mix to see if there are opportunities to introduce more mid-to-high value items that could appeal to customers and increase overall transaction values.
    - Customer Segmentation: The data may indicate different customer segments that the business can target with specific offers. For example, frequent small order customers could be encouraged to make larger purchases through loyalty programs or exclusive offers.

Question 2: Find the number of orders that are small, medium, or large order value (small: 0-5 dollars, medium: 5-10 dollars, large: 10+)

Answer –

Query –

```
SELECT
  COUNT(CASE WHEN SALES_VALUE BETWEEN 0 AND 5 THEN 1 END) AS small_orders,
  COUNT(CASE WHEN SALES_VALUE BETWEEN 5 AND 10 THEN 1 END) AS medium_orders,
  COUNT(CASE WHEN SALES_VALUE > 10 THEN 1 END) AS large_orders
FROM
`transaction_data.transaction_data`;
```



Results Overview:

- **Small Orders (0-5 dollars):** 1,145,982 orders
- **Medium Orders (5-10 dollars):** 128,396 orders
- **Large Orders (10+ dollars):** 39,405 orders

Insights:

1. **Predominance of Small Orders:**
    - The majority of the orders fall into the "Small Orders" category, with over 1.14 million transactions. This suggests that a significant portion of the customer base prefers making low-value purchases, even within a tighter price range (0-5 dollars).
    - The high volume of small orders indicates that customers are likely purchasing low-cost items frequently, which may include everyday essentials or impulse buys.
2. **Moderate Volume of Medium Orders:**
    - The number of medium orders (128,396) is significantly lower than small orders, but it still represents a substantial portion of transactions.
    - This could indicate a customer segment that prefers a moderate level of spending, possibly buying items that are not too expensive but are slightly higher in value compared to the smallest orders.

3. **Smaller, Yet Significant, Large Orders:**
    - There are 39,405 orders classified as "Large Orders" (10+ dollars), which is relatively small compared to the other categories but significant enough to warrant attention.
    - The relatively smaller number of large orders could reflect a cautious approach to spending, with fewer customers willing to make larger purchases, or it might indicate a need to expand offerings in this price range.
4. **Comparison with Previous Insight:**
    - Comparing this result with the previous distribution (0-10, 10-20, 20+ dollars), we observe that tightening the small order range to 0-5 dollars still captures the majority of transactions, suggesting a consistent pattern of low-value purchases.
5. **Potential Business Implications:**
    - **Product Positioning:** The high volume of small orders might indicate an opportunity to introduce higher-value products or bundles that encourage customers to spend more.
    - **Promotional Strategies:** Given the large number of low-value transactions, promotions like "buy one get one free" or discounts on bulk purchases could be effective in driving customers towards medium and large order categories.
    - **Customer Segmentation:** Understanding the demographics and behaviors of customers making small versus large purchases can help tailor marketing strategies to different segments.

Question 3: Find top 3 stores with highest foot traffic for each week (Foot traffic: number of customers transacting)

Answer –

Query –

```
SELECT
  WEEK_NO,
  STORE_ID,
  foot_traffic
FROM (
  SELECT
    WEEK_NO,
    STORE_ID,
    COUNT(DISTINCT HOUSEHOLD_KEY) AS foot_traffic,
    ROW_NUMBER() OVER (PARTITION BY WEEK_NO ORDER BY COUNT(DISTINCT HOUSEHOLD_KEY) DESC) AS rank
  FROM
    `transaction_data.transaction_data`
  GROUP BY
    WEEK_NO, STORE_ID
)
WHERE rank <= 3
ORDER BY WEEK_NO, rank;
```

Query results

SAVE RESULTS | EXPLORE DATA

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

Row	WEEK_NO	STORE_ID	foot_traffic
1	1	32004	5
2	1	324	3
3	1	367	3
4	2	32004	7
5	2	313	6
6	2	367	5
7	3	367	10
8	3	32004	9
9	3	356	8

Insight –

1. **Consistent Top Performers:** Stores that regularly appear in the top 3 for foot traffic likely benefit from strong location, customer loyalty, or effective promotions, making them ideal models for best practices.
2. **Variable Store Rankings:** Frequent changes in top stores suggest that external factors like promotions or seasonal trends may significantly influence customer behavior, highlighting the need for adaptive strategies.
3. **Emerging Trends:** Sudden increases in foot traffic at certain stores could indicate the success of recent changes or events, offering opportunities to replicate these strategies across other locations.

Question 4: Create a basic customer profiling with first, last visit, number of visits, average money spent per visit and total money spent order by highest avg money

Answer –

Query -

```
SELECT
  HOUSEHOLD_KEY,
  MIN(DAY) AS first_visit,
  MAX(DAY) AS last_visit,
  COUNT(BASKET_ID) AS number_of_visits,
  ROUND(AVG(SALES_VALUE), 2) AS avg_money_spent_per_visit,
  ROUND(SUM(SALES_VALUE), 2) AS total_money_spent
FROM
  `transaction_data.transaction_data`
GROUP BY
  HOUSEHOLD_KEY
ORDER BY
  avg_money_spent_per_visit DESC;
```

Query results

SAVE RESULTS EXPLORE DATA

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

Row	HOUSEHOLD_KEY	first_visit	last_visit	number_of_visits	avg_money_spent_pe	total_money_spent
1	1730	34	707	99	16.73	1656.76
2	1727	109	118	9	12.72	114.51
3	2163	51	674	21	10.54	221.32
4	1339	52	701	18	10.42	187.53
5	991	44	665	44	10.26	451.6
6	2219	80	702	32	10.05	321.66
7	2428	67	702	18	10.0	180.0
8	755	36	709	576	9.48	5461.54
9	1023	107	710	2202	8.58	18901.09
10	120	62	653	16	8.18	130.92

Insight –

Insights from the Customer Profiling Data:

1. **High-Spending Customers:**
    - The customer with **HOUSEHOLD_KEY 1730** has the highest average money spent per visit ($16.73) and a significant total money spent ($1656.76) across 99 visits. This indicates a consistent pattern of high-value transactions.

2. **Frequent Visitors with High Total Spending:**
    - **HOUSEHOLD_KEY 1023** shows a very high total spending ($18901.09) across an exceptionally large number of visits (2202), although their average spending per visit is lower ($8.58). This customer is likely making frequent smaller purchases.
3. **Potential High-Value Customers:**
    - **HOUSEHOLD_KEY 2428** and **HOUSEHOLD_KEY 755** have relatively high total spending but differ in visit frequency. **HOUSEHOLD_KEY 755** has made 576 visits with an average spend of $9.48, while **HOUSEHOLD_KEY 2428** has made fewer visits (18) but with a higher average spend ($10.00). Both show potential for targeted marketing to increase their transaction size or frequency.
4. **Customers with High Average Spend and Low Visits:**
    - **HOUSEHOLD_KEY 1727** and **HOUSEHOLD_KEY 2163** have high average spends ($12.72 and $10.54 respectively) but a lower number of visits (9 and 21). These customers could be targeted with campaigns encouraging them to visit more frequently, as they already demonstrate a willingness to spend more per visit.
5. **Target for Retention and Growth:**
    - Customers with lower total spending but a relatively high average spend per visit (e.g., **HOUSEHOLD_KEY 1339** and **HOUSEHOLD_KEY 991**) represent an opportunity for growth by encouraging repeat visits.

Question 5: Do a single customer analysis selecting most spending customer for whom we have demographic information(because not all customers in transaction data are present in demographic table)(show the demographic as well as total spent)

Answer –

Query –

```
WITH total_spent AS (
  SELECT
    HOUSEHOLD_KEY,
    SUM(SALES_VALUE) AS total_spent
  FROM
    `transaction_data.transaction_data`
  GROUP BY
    HOUSEHOLD_KEY
  ORDER BY
    total_spent DESC

)
SELECT
  t.HOUSEHOLD_KEY,
  d.*,
  t.total_spent
FROM
  total_spent t
JOIN
  `hh_demographic.hh_demographic` d
ON
  t.HOUSEHOLD_KEY = d.HOUSEHOLD_KEY
ORDER BY
  t.total_spent DESC
```

Query results

SAVE RESULTS | EXPLORE DATA

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH

Row	HOUSEHOLD_KEY	AGE_DESC	MARITAL_STATUS_CODE	INCOME_DESC	HOMEOWNER_DE
1	1609	45-54	A	125-149K	Homeowner

Insight –

1. **High-Income Household:** This household falls within the high-income bracket of $125K - $149K, indicating substantial purchasing power. The high total spending aligns with their income level.

2. **Mature Age Group:** The household is in the 45-54 age range, typically associated with established careers and stable income, which could explain their ability to spend more.
3. **Homeownership:** Being homeowners, they may have spending patterns that include investments in home-related products, durable goods, or premium items.
4. **Target Demographic:** As a high-spending, married homeowner in a high-income bracket, this household represents an ideal target for premium products, loyalty programs, and exclusive promotions.
5. **Large Family:** The household is a large family with at least two adults and three or more children. This size suggests that their purchasing needs are likely diverse and extensive, covering a wide range of products from groceries and household items to children's goods and possibly educational or entertainment-related products.
6. **High Spending:** With a total spend of over $13,800, this household represents a significant customer segment for the business. Their large household size likely drives the high spending.
7. **Potential for Bulk Purchases:** The large family size might indicate a tendency for bulk purchasing, making this household a prime candidate for promotions on bulk items or family-sized products.

This household's profile as a large, high-income family with significant spending power suggests they could be highly responsive to targeted marketing that meets their unique needs, potentially increasing their lifetime value as customers.

Question 6: Find products(product table : SUB_COMMODITY_DESC) which are most frequently bought together and the count of each combination bought together. do not print a combination twice (A-B / B-A)

Answer –

Query –

```
SELECT
  p1.SUB_COMMODITY_DESC AS product_1,
  p2.SUB_COMMODITY_DESC AS product_2,
  COUNT(*) AS count_together
FROM
  `transaction_data.transaction_data` t1
JOIN
  `transaction_data.transaction_data` t2
ON
  t1.BASKET_ID = t2.BASKET_ID
  AND t1.PRODUCT_ID < t2.PRODUCT_ID
JOIN
  `product.product` p1
ON
  t1.PRODUCT_ID = p1.PRODUCT_ID
JOIN
  `product.product` p2
ON
  t2.PRODUCT_ID = p2.PRODUCT_ID
GROUP BY
  product_1, product_2
HAVING
  product_1 <> product_2
ORDER BY
  count_together DESC;
```

Query results

SAVE RE

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS

Row	product_1	product_2	count_together
1	FLUID MILK WHITE ONLY	SOFT DRINKS 12/18&15PK CA...	3580
2	FLUID MILK WHITE ONLY	YOGURT NOT MULTI-PACKS	3520
3	MAINSTREAM WHITE BREAD	FLUID MILK WHITE ONLY	3158
4	FLUID MILK WHITE ONLY	BANANAS	2971
5	YOGURT NOT MULTI-PACKS	FLUID MILK WHITE ONLY	2433
6	SFT DRNK 2 LITER BTL CARB I...	FLUID MILK WHITE ONLY	2417
7	SHREDDED CHEESE	FLUID MILK WHITE ONLY	2408
8	BANANAS	YOGURT NOT MULTI-PACKS	2101
9	MAINSTREAM WHITE BREAD	SOFT DRINKS 12/18&15PK CA...	2041
10	FLUID MILK WHITE ONLY	POTATO CHIPS	2000

Insights –

1. **Fluid Milk is a Central Product:**
    - **"Fluid Milk White Only"** appears frequently across various combinations, indicating it is a staple product that customers often buy alongside other items. This product is paired with a wide range of items such as soft drinks, yogurt, bread, and bananas, highlighting its importance in grocery baskets.
2. **Popular Combinations:**
    - The top combinations involve **"Fluid Milk White Only"** paired with **"Soft Drinks"** (3580 times), **"Yogurt"** (3520 times), and **"Mainstream White Bread"** (3158 times). These combinations suggest that customers purchasing milk are likely stocking up on other essential groceries.
3. **Cross-Category Pairings:**
    - The pairings show that customers often combine dairy products like milk with other product categories such as beverages (soft drinks), bakery items (bread), and fruits (bananas). This indicates a pattern where customers are likely completing their essential grocery shopping in one trip.
4. **Staple and Convenience Items:**
    - Items like **"Bananas," "Shredded Cheese,"** and **"Potato Chips"** are also frequently bought with fluid milk, suggesting these are staple or convenience items that are regularly added to grocery baskets.

Question 7: Find the weekly change in Revenue Per Account (RPA) (difference in spending by each customer compared to last week)(use lag function)

Answer –

Query –

```
SELECT
  HOUSEHOLD_KEY,
  WEEK_NO,
  ROUND(SUM(SALES_VALUE), 2) AS weekly_revenue,
  ROUND(LAG(SUM(SALES_VALUE)) OVER (PARTITION BY HOUSEHOLD_KEY ORDER BY WEEK_NO), 2) AS prev_week_revenue,
  ROUND((SUM(SALES_VALUE) - LAG(SUM(SALES_VALUE)) OVER (PARTITION BY HOUSEHOLD_KEY ORDER BY WEEK_NO)), 2) AS
revenue_change
FROM
  `transaction_data.transaction_data`
GROUP BY
  HOUSEHOLD_KEY, WEEK_NO
ORDER BY
  HOUSEHOLD_KEY, WEEK_NO;
```

Query results

SAVE RESULTS

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTIO

Row	HOUSEHOLD_KEY	WEEK_NO	weekly_revenue	prev_week_revenue	revenue_change
1	1	8	42.58	null	null
2	1	10	14.01	42.58	-28.57
3	1	13	14.03	14.01	0.02
4	1	14	25.71	14.03	11.68
5	1	15	10.98	25.71	-14.73
6	1	16	9.09	10.98	-1.89
7	1	17	13.98	9.09	4.89
8	1	19	47.35	13.98	33.37
9	1	20	31.77	47.35	-15.58
10	1	22	38.98	31.77	7.21

1. **Revenue Volatility:**
    - **Observation:** Many households exhibit fluctuations in their weekly spending. Some weeks show higher revenues, while others may drop or show no spending at all.
    - **Insight:** This variability could be influenced by factors such as changing household needs, income cycles, or external events like promotions and

holidays. Recognizing these patterns can help in predicting future spending and tailoring marketing strategies.

2. **Identifying Key Customer Segments:**
    - **Observation:** Certain households consistently generate high revenue, while others might have sporadic spikes in spending.
    - **Insight:** High-revenue households are likely your most valuable customers. Focus on these segments with loyalty programs and personalized offers to encourage continued spending. Conversely, sporadic spenders may be responding to specific promotions or events—target them with time-sensitive deals.
3. **Seasonal and Cyclical Trends:**
    - **Observation:** Revenue spikes may align with certain times of the year, such as holidays, back-to-school seasons, or specific promotional periods.
    - **Insight:** Understanding these trends allows for better inventory planning, marketing campaigns, and promotional timing. You can capitalize on high-spending periods by intensifying marketing efforts and offering relevant products.

Question 8: Identify the top 5 products that generate the most revenue.

Answer –

Query -

```
SELECT
  p.PRODUCT_ID,
  p.SUB_COMMODITY_DESC,
  ROUND(SUM(t.SALES_VALUE), 2) AS total_revenue
FROM
  `transaction_data.transaction_data` t
JOIN
  `product.product` p
ON
  t.PRODUCT_ID = p.PRODUCT_ID
GROUP BY
  p.PRODUCT_ID, p.SUB_COMMODITY_DESC
ORDER BY
  total_revenue DESC
LIMIT 5;
```

Query results

JOB INFORMATION | RESULTS | CHART | JSON | EXECUTIO

Row	PRODUCT_ID	SUB_COMMODITY_DESC	total_revenue
1	6534178	GASOLINE-REG UNLEADED	249719.5
2	6533889	GASOLINE-REG UNLEADED	23690.27
3	1029743	FLUID MILK WHITE ONLY	20598.38
4	6534166	GASOLINE-REG UNLEADED	17323.25
5	1082185	BANANAS	14828.1

Insight –

1. **Dominance of Gasoline:**
    - **Gasoline (Regular Unleaded)** products dominate the top 5, with three out of five spots and substantial total revenue figures. The highest revenue product generated $249,719.50, which is significantly higher than other products in the list.
    - This indicates that gasoline is a key revenue driver, likely due to frequent and necessary purchases by consumers.
2. **High Demand for Fluid Milk:**

- **Fluid Milk White Only** ranks third, with a total revenue of $20,598.38. Milk is a staple item in many households, explaining its high sales volume and revenue.

3. **Bananas as a Popular Grocery Item:**
    - **Bananas** also make it to the top 5, with total revenue of $14,828.10. This suggests that bananas are a frequently purchased item, likely due to their affordability, nutritional value, and popularity as a daily snack or ingredient.
4. **Revenue Concentration:**
    - The significant revenue gap between the top gasoline product and the others suggests a concentration of revenue in certain high-volume or high-value products. Gasoline, in particular, represents a major portion of sales, which could be due to its essential nature and high price point per unit.

Question 9: Calculate the average basket size (number of items per transaction) for each store.

Answer-

Query –

```
SELECT
  STORE_ID,
  AVG(QUANTITY) AS avg_basket_size
FROM
  `transaction_data.transaction_data`
GROUP BY
  STORE_ID
ORDER BY
  avg_basket_size DESC;
```

Query results

JOB INFORMATION | RESULTS | CHART

Row	STORE_ID	avg_basket_size
1	3065	24007.0
2	489	22842.0
3	3098	17956.0
4	144	14833.0
5	896	14499.0
6	648	10802.0
7	2790	10762.0
8	84	10007.0
9	3006	9857.0
10	3090	9436.5

Insight –

1. **High-Performing Stores:** Stores like **3065** and **489** have the highest average basket sizes, indicating strong purchasing power or effective sales strategies.
2. **High-Value Transactions:** All top 10 stores have substantial average basket sizes, suggesting customers are making large purchases per visit.
3. **Growth Potential:** Lower-ranked stores like **3006** and **3090** could benefit from targeted strategies to boost average basket size, such as promotions or upselling techniques.

4. Best Practices: Analyzing top-performing stores can reveal successful strategies that might be applied across other locations to increase overall sales.

Question 10: Find the percentage of customers who are repeat buyers (have made more than one purchase)

Answer –

Query –

```
SELECT
  COUNT(DISTINCT CASE WHEN purchase_count > 1 THEN HOUSEHOLD_KEY END) * 100.0 / COUNT(DISTINCT HOUSEHOLD_KEY) AS
repeat_buyer_percentage
FROM
  (
    SELECT
      HOUSEHOLD_KEY,
      COUNT(DISTINCT BASKET_ID) AS purchase_count
    FROM
      `transaction_data.transaction_data`
    GROUP BY
      HOUSEHOLD_KEY
  );
```

Query results

JOB INFORMATION | RESULTS

Row	repeat_buyer_percen
1	99.84

- **High Repeat Buyer Percentage:**
  - A percentage of 99.84% indicates that almost all customers in the dataset have made more than one purchase. This could be a sign of strong customer loyalty or a product/service that encourages frequent purchases.
- **Potential Factors:**
  - The dataset might represent a business model where repeat purchases are common (e.g., subscription services, essential goods), or there could be promotional strategies in place that successfully encourage repeat buying.

Question 11: Calculate the Customer Lifetime Value (CLTV) by estimating the total revenue generated by customers over time.

Answer –

Query –

```
SELECT
  HOUSEHOLD_KEY,
  SUM(SALES_VALUE) AS lifetime_value
FROM
  `transaction_data.transaction_data`
GROUP BY
  HOUSEHOLD_KEY
ORDER BY
  lifetime_value DESC;
```

Query results

JOB INFORMATION | RESULTS | CHART

Row	HOUSEHOLD_KEY	lifetime_value
1	1023	18901.09000000...
2	1609	13804.37999999...
3	2322	11934.65999999...
4	1453	10720.71999999...
5	2459	10307.54999999...
6	1430	10147.20999999...
7	718	9577.629999999...
8	1111	9542.199999999...
9	1653	9519.929999999...
10	400	9481.189999999...

Insight -

1. **High-Value Customers:** The top 10 households have lifetime values exceeding $9,400, with **HOUSEHOLD_KEY 1023** leading at $18,901.09. These customers are crucial revenue drivers.
2. **Strong Loyalty:** These high lifetime values suggest strong customer loyalty, indicating satisfaction with the brand and products.
3. **Opportunities:** Focus on engaging these customers with personalized offers, loyalty rewards, and exclusive promotions to further increase their value.

4. **Retention:** Prioritize retention strategies to maintain these valuable customers and encourage continued spending.

Cumulative Insights:

1. **Small Purchases Are Common:**
    - Most customers tend to make small purchases, usually under $10. This shows that people often buy everyday items or small quantities rather than making large purchases.
2. **Few Large Purchases:**
    - There are not many high-value transactions (over $20). This could mean that customers are cautious about spending or that there aren't enough high-value products to buy.
3. **Successful Stores with Big Sales:**
    - Some stores, like STORE_ID 3065 and 489, have high average sales per transaction. These stores are doing something right, whether it's their location, the products they sell, or how they sell them.
4. **Loyal Customers:**
    - Nearly all customers (99.84%) come back to make more than one purchase, showing strong customer loyalty. This means once people shop with you, they're likely to return.
5. **Valuable Customers:**
    - The top 10 households have spent a lot over time, with some spending over $18,000. These customers are really important to your business.
6. **Popular Product Combinations:**
    - Items like milk, soft drinks, and bread are often bought together. This suggests that customers are buying these essentials together regularly.
7. **Spending Fluctuates:**
    - Customers' spending varies week by week, likely influenced by things like promotions, holidays, or changing needs.

Recommendations:

1. **Encourage Bigger Purchases:**
    - Offer deals that encourage customers to buy more at once, such as discounts for buying in bulk or bundling items together.
2. **Learn from Top Stores:**
    - Study what the successful stores are doing well, like product placement or customer service, and apply these strategies in other locations.
3. **Boost Loyalty Programs:**
    - Since most customers come back, reward them with a loyalty program that offers discounts, special offers, or other perks to keep them engaged.
4. **Sell More Items Together:**
    - Use the insight that certain products are bought together to create special offers or discounts on these combinations.
5. **Expand Product Choices:**
    - Introduce more higher-value items that might encourage customers to make larger purchases.
6. **Time Your Promotions:**
    - Plan your sales and promotions around times when spending tends to increase, and make sure you have enough stock of popular items.
7. **Keep Your Best Customers Happy:**
    - Focus on personalized offers and excellent service for your top customers to keep them coming back.