

E-commerce Customer Behavior

STATISTICS ANALYSIS:

The analysis of customer behavior within the e-commerce realm is not merely an exercise in understanding preferences; it's a strategic imperative. It allows businesses to craft personalized experiences, refine marketing strategies, optimize retention efforts, and, ultimately, foster long-term relationships with customers.

KEY METRICS

1. Total Customers
2. Average Items Purchased
3. Overall Average Rating
4. Overall Total Spend
5. Average Days Since Last Purchase
6. Percentage of City Distribution
7. Percentage of Gender Distribution
8. Satisfaction & Retention Customers
9. Membership Impact
10. Discount Impact
11. Top 10 Highest Average Rating Number Of Items Purchase
12. Gender and Age Group Distribution
13. Total Spend by Membership
14. Top 5 Cities with Highest Number of Items Purchase
15. Number of Customers by Time Interval

STATISTICS CALCULATION

1. Total Customers

The screenshot shows a SQL editor window titled "SQL File 3". The query entered is:

```
1 • SELECT COUNT(DISTINCT Customer_ID) AS Total_Customers
2 FROM customer;
3 |
```

Below the query editor, the "Result Grid" is visible, showing the output of the query:

Total_Customers
350

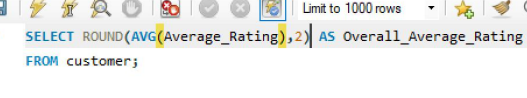
2. Average Items Purchased

The screenshot shows the SQL Studio interface. The top toolbar includes icons for file operations, execution, and search. The query editor contains the following SQL code:

```
1 • SELECT ROUND(AVG(Items_Purchased),2) AS Average_Items_Purchased
2 FROM customer;
3
```

Below the query editor, the 'Result Grid' is visible, showing a single column header 'Average_Items_Purchased' and one data row with the value '12.60'. The 'Filter Rows' field is empty, and the 'Wrap Cell Content' checkbox is checked.

3. Overall Average Rating



SQL File 3*

Limit to 1000 rows

```

1 • SELECT ROUND(AVG(Average_Rating),2) AS Overall_Average_Rating
2 FROM customer;
3

```

Result Grid

Overall_Average_Rating
4.02

4. Overall Total Spend

SQL File 3* x

Limit to 1000 rows

```
1 • SELECT ROUND(SUM(Total_Spend),2) AS Overall_Total_Spend
2 FROM customer;
3
```

Result Grid

Overall_Total_Spend
295883.6

5. Average Days Since Last Purchase

SQL File 3* x

Limit to 1000 rows

```
1 • SELECT ROUND(AVG(Days_Since_Last_Purchase),2) AS Average_Days_Since_Last_Purchase
2 FROM customer;
3
```

Result Grid

Average_Days_Since_Last_Purchase
26.59

6. Percentage of City Distribution

SQL File 3* x

Limit to 1000 rows

```
1 • SELECT City, COUNT(*) AS Customer_Count, ROUND((COUNT(*) * 100.0 / (SELECT COUNT(*) FROM customer)),2) AS Pe
2 FROM customer
3 GROUP BY City
4 ORDER BY Percentage DESC;
5
```

Result Grid

City	Customer_Count	Percentage
New York	59	16.86
Los Angeles	59	16.86
Chicago	58	16.57
San Francisco	58	16.57
Miami	58	16.57
Houston	58	16.57

7. Percentage of Gender Distribution

SQL File 3* x

Limit to 1000 rows

```
1 • SELECT Gender, COUNT(*) AS Gender_Count, ROUND((COUNT(*) * 100.0 / (SELECT COUNT(*) FROM customer)),2) AS Pe
2 FROM customer
3 GROUP BY Gender;
4
```

Result Grid

Gender	Gender_Count	Percentage
Female	175	50.00
Male	175	50.00

8. Satisfaction & Retention Customers

SQL File 3*

```
1 • SELECT Satisfaction_Level, COUNT(*) AS Count
2 FROM customer
3 GROUP BY Satisfaction_Level
4 ORDER BY Count DESC;
5
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

Satisfaction_Level	Count
Satisfied	125
Unsatisfied	116
Neutral	107
N/A	2

9. Membership Impact

SQL File 3*

```
1 • SELECT Membership_Type, ROUND(AVG(Average_Rating),2) AS Avg_Rating, COUNT(*) AS Count
2 FROM customer
3 GROUP BY Membership_Type;
4
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

Membership_Type	Avg_Rating	Count
Gold	4.68	117
Silver	4.05	117
Bronze	3.33	116

10. Discount Impact

SQL File 3*

```
1 • SELECT Discount_Applied, ROUND(AVG(Total_Spend),2) AS Avg_Total_Spend
2 FROM customer
3 GROUP BY Discount_Applied;
4
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

Discount_Applied	Avg_Total_Spend
TRUE	787.27
FALSE	903.49

11. Top 10 Highest Average Rating Number Of Items Purchase

SQL File 3*

```
1 • SELECT Items_Purchased, ROUND(AVG(Average_Rating),2) AS Avg_Rating
2   FROM customer
3   GROUP BY Items_Purchased
4   ORDER BY Avg_Rating DESC
5   LIMIT 10;
6
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

	Items_Purchased	Avg_Rating
▶	21	4.9
	20	4.8
	17	4.8
	18	4.72
	19	4.62
	16	4.59
	15	4.52
	14	4.42
	12	4.16
	13	4.11

12. Gender and Age Group Distribution

SQL File 3*

```
1 • SELECT
2   CASE
3     WHEN Age BETWEEN 18 AND 25 THEN '18-25'
4     WHEN Age BETWEEN 26 AND 35 THEN '26-35'
5     WHEN Age BETWEEN 36 AND 45 THEN '36-45'
6     ELSE 'Above 45'
7   END AS Age_Group,
8   Gender,
9   COUNT(*) AS Count
10  FROM customer
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	Age_Group	Gender	Count
▶	26-35	Male	174
	36-45	Female	115
	26-35	Female	60
	36-45	Male	1

13. Total Spend by Membership

SQL File 3*

```
1 SELECT Membership_Type, ROUND(SUM(Total_Spend),2) AS Total_Spend
2 FROM customer
3 GROUP BY Membership_Type;
4
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	Membership_Type	Total_Spend
▶	Gold	153403.9
	Silver	87566.6
	Bronze	54913.1

14. Top 5 Cities with Highest Number of Items Purchase

SQL File 3* x

Limit to 1000 rows

```
1 SELECT City, SUM(Items_Purchased) AS Total_Items_Purchased
2 FROM customer
3 GROUP BY City
4 ORDER BY Total_Items_Purchased DESC
5 LIMIT 5;
6
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

City	Total_Items_Purchased
San Francisco	1160
New York	901
Los Angeles	689
Miami	675
Chicago	546

15. Number of Customers by Time Interval

SQL File 3* x

Limit to 1000 rows

```
1 SELECT
2 CASE
3     WHEN Days_Since_Last_Purchase <= 30 THEN '0-30 days'
4     WHEN Days_Since_Last_Purchase BETWEEN 31 AND 60 THEN '31-60 days'
5     ELSE 'Above 60 days'
6 END AS Time_Interval,
7 COUNT(*) AS Customer_Count
8 FROM customer
9 GROUP BY Time_Interval;
10
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

Time_Interval	Customer_Count
0-30 days	226
31-60 days	121
Above 60 days	3