

SQL Case Study: Analysis on Foodie-Fi Dataset

Objective:

To analyze customer subscription data for Foodie-Fi streaming service and derive insights such as customer counts, plan transitions, and average upgrade times.

Dataset Description:

The dataset consists of two tables: "subscriptions" and "plans".

1. Subscriptions Table:

- Columns: customer_id, plan_id, start_date
- Contains data on customer subscriptions, including the customer's ID, the ID of the subscription plan, and the start date of the subscription.
- Each row represents a subscription record for a customer.

2. Plans Table:

- Columns: plan_id, plan_name, price
- Contains data on subscription plans available in Foodie-Fi, including the plan ID, plan name, and price.
- Each row represents a unique subscription plan.

The analysis involves answering various questions based on the subscription data, including customer counts, plan transitions, and average upgrade times.

Answers:

Q1. How many customers has Foodie-Fi ever had?

Ans. Foodie-Fi has had a total of 1000 customers since its launch.

Q2. What is the monthly distribution of trial plan start_date values for our dataset - use the start of the month as the group by value?

Ans. The monthly distribution of trial plan starts dates in the dataset, with counts for each month, is as follows:

January: 88	February: 68	March: 94	April: 81
May: 88	June: 79	July: 89	August: 88
September: 87	October: 79	November: 75	December: 84

Q3. What plan start_date values occur after the year 2020 for our dataset? Show the breakdown by count of events for each plan_name?

Ans. The breakdown of plan starts_date values occurring after the year 2020 in the dataset, categorized by the count of events for each plan_name, is as follows:

- ❖ Churn: 71 events
 - ❖ Pro Annual: 63 events
 - ❖ Pro Monthly: 60 events
 - ❖ Basic Monthly: 8 events
-

Q4. What is the customer count and percentage of customers who have churned rounded to 1 decimal place?

Ans. There are 307 customers who have churned, constituting approximately 30.7% of the total customer base.

Q5. How many customers have churned straight after their initial free trial - what percentage is this rounded to the nearest whole number?

Ans. A total of 307 customers churned straight after their initial free trial, constituting approximately 31% of the customers who had the initial free trial.

Q6. What is the number and percentage of customer plans after their initial free trial?

Ans. The total number of customers with plans after their initial free trial is 1000. This constitutes 100.0% of the customers who have subscribed to plans excluding the initial free trial.

Q7. What is the customer count and percentage breakdown of all 5 plan_name values at 2020-12-31?

Ans. The breakdown of customer counts and percentages for each plan name at the date '2020-12-31' is as follows:

- ❖ Trial: 0 customers, 0%
- ❖ Basic monthly: 0 customers, 0%
- ❖ Pro monthly: 0 customers, 0%
- ❖ Pro annual: 0 customers, 0

❖ Churn: 1 customer, 100%

Q8. How many customers have upgraded to an annual plan in 2020?

Ans. In 2020, a total of 195 customers upgraded to an annual plan.

Q9. How many days on average does it take for a customer to an annual plan from the day they join Foodie-Fi?

Ans. On average, it takes approximately 97.6 days for a customer to upgrade to an annual plan from the day they join Foodie-Fi.

Q10. Can you further breakdown this average value into 30-day periods (i.e., 0-30 days, 31-60 days etc.)?

Ans. The breakdown of the average number of days it takes for a customer to upgrade to an annual plan into 30-day periods is as follows:

- ❖ 1-30 days: 52 customers
 - ❖ 31-60 days: 29 customers
 - ❖ 61-90 days: 33 customers
 - ❖ 91-120 days: 31 customers
 - ❖ 121-150 days: 45 customers
 - ❖ 151-180 days: 37 customers
 - ❖ 181-210 days: 21 customers
 - ❖ 211-240 days: 3 customers
 - ❖ 241-270 days: 4 customers
 - ❖ 271-300 days: 1 customer
 - ❖ 301-330 days: 1 customer
 - ❖ 331-360 days: 1 customer
-

Q11. How many customers downgraded from a pro monthly to a basic monthly plan in 2020?

Ans. In 2020, a total of 163 customers downgraded from a pro monthly to a basic monthly plan.
