## Case Study #3 - Foodie-Fi

**Data Analysis Questions** 

Question 1: How many customers has Foodie-Fi ever had?

Foodie-Fi had 1000 total customers.

amount\_of\_customers

Question 2: 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

The monthly distribution of trial plan start date is as shown below. Month 1 indicates January while Month 12 indicates December. A quick look shows that February is where there are less people starting trail plans for Foodie-Fi at 68, while March is the most with 94 trail plans.

months	count
1	88
2	68
3	94
4	81
5	88
6	79
7	89
8	88
9	87
10	79
11	75
12	84

Question 3: What plan start date values occur after the year 2020 for our dataset? Show the breakdown by count of events for each plan name.

We see that there are 8 basic monthly plans, 63 pro annual plans, and 60 pro monthly plans that started after the year 2020. We also see that 71 customers also churned their accounts. There were NO customer who started their trail after the year 2020.

plan_name	count
basic monthly	8
churn	71
pro annual	63
pro monthly	60

Question 4: What is the customer count and percentage of customers who have churned rounded to 1 decimal place?

There were 307 customers that churned. This equates to about 31% of all customers who churned their accounts.



Question 5: How many customers have churned straight after their initial free trial - what percentage is this rounded to the nearest whole number?

There were 92 customers that have churned straight after their initial free trail. This is about 9% of the total customers.

plan_	_id	previous_plan	count	precentage
4		0	92	9.00

Question 6: What is the number and percentage of customer plans after their initial free trial?

There were 546 customer who bought the basic monthly after their trail plan. This is about 55% of the total customers. 325 customers bought pro monthly after their trail plan, which equates to about 33% of the total customer. Lastly there were only 37 customers who bought the pro annual after their trail plan with is about 4% of the total customers.

plan_id	previous_plan	count	precentage
1	0	546	55.00
2	0	325	33.00
3	0	37	4.00

Question 7: What is the customer count and percentage breakdown of all 5 plan name values at 2020-12-31?

Trail plans had 19 customers which is 1.9 percent of the total customers. Basic monthly had 224 customers which is 22.4 percent. Pro monthly had 326 customers, which is about 32.6 percent. Pro annual had 195 customers, which is about 19.5 percent. Lastly, churn had 236 customers, which is about 23.6 percent of all customers.

plan_name	count	precentage
pro annual	195	19.5
trial	19	1.9
churn	236	23.6
pro monthly	326	32.6
basic monthly	224	22.4

Question 8: How many customers have upgraded to an annual plan in 2020?

195 customers have upgraded to an annual plan in 2020.

plan_id	unique_customers
3	195

Question 9: How many days on average does it take for a customer to an annual plan from the day they join Foodie-Fi?

It takes about 105 days for a customer to upgrade to an annual plan from the day they join Foodie-Fi.

Question 10: Can you further breakdown this average value into 30-day periods (i.e. 0-30 days, 31-60 days etc.)

breaking_down_into_30days	count
0 - 30 days	48
30 - 60 days	25
60 - 90 days	33
90 - 120 days	35
120 - 150 days	43
150 - 180 days	35
180 - 210 days	27
210 - 240 days	4
240 - 270 days	5
270 - 300 days	1
300 - 330 days	1
330 - 360 days	1

Question 11: How many customers downgraded from a pro monthly to a basic monthly plan in 2020?

No one downgraded from pro monthly to basic monthly plan in 2020.

