

**MINISTRY OF EDUCATION AND TRAINING  
EASTERN INTERNATIONAL UNIVERSITY**



**MIS 443  
BUSINESS DATA MANAGEMENT**

**Group Final Project - Case Study #3**

**Foodie-Fi**

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## INTRODUCTION

This report presents an in-depth SQL analysis of **Foodie-Fi**, a subscription-based streaming platform for food lovers. The primary objective is to analyze customer subscription behaviors, revenue trends, and churn rates to gain meaningful business insights.

Using SQL queries, we explore key aspects such as the number of customers, subscription transitions, revenue distribution, and customer retention. By extracting and interpreting data from the **Foodie-Fi** database, this report provides valuable insights into user engagement, helping the company optimize its pricing strategy and improve customer retention.

The findings in this report are based on structured queries that highlight important trends and patterns in customer behavior, ultimately aiding in strategic decision-making for the platform.

## CUSTOMER JOURNEY

The following section provides a brief summary of *how each of the 8 sampled customers interacted with Foodie-Fi*. It highlights their subscription choices, upgrades, and cancellations. This analysis helps to understand customer behavior, including common upgrade patterns and churn trends.

Now, let's look at each customer's journey:

| Customer No. | Description   |
|--------------|---|
| Customer 51  | Started with a trial, upgraded to Basic Monthly, then switched to Pro Annual. Churned after one year. |
| Customer 70  | Started with a trial, moved to Basic Monthly, and later upgraded to Pro Monthly after six months.     |
| Customer 273 | Used the trial and continued with Basic Monthly but did not upgrade further.                          |
| Customer 350 | Started with a trial and then subscribed to Basic Monthly without further upgrades.                   |
| Customer 652 | Went from trial to Basic Monthly and later upgraded to Pro Annual within two months.                  |
| Customer 758 | Started with a trial, upgraded to Basic Monthly, and then switched to Pro Monthly within two months.  |
| Customer 839 | Used the trial but churned immediately after one week.  |
| Customer 951 | Started with a trial and directly upgraded to Pro Monthly after one week.                             |

*Table 1: Eight sampled customers interacted with Foodie-Fi*

## DATA ANALYSIS

This section presents a structured analysis of Foodie-Fi's customer subscription data, focusing on key business metrics such as customer growth, subscription trends, churn rates, and plan transitions. By answering these data-driven questions, we aim to uncover insights into customer behavior, upgrade patterns, and retention challenges. The findings will help Foodie-Fi refine its subscription strategies and improve overall business performance.

Foodie-Fi is a subscription-based streaming service that provides exclusive food-related content to its customers. Users can access different plans, ranging from a free trial to premium paid subscriptions. The platform operates on a **tiered subscription model**, allowing customers to choose between **Basic Monthly**, **Pro Monthly**, and **Pro Annual** plans. Additionally, users can cancel their subscriptions, resulting in a churn status.

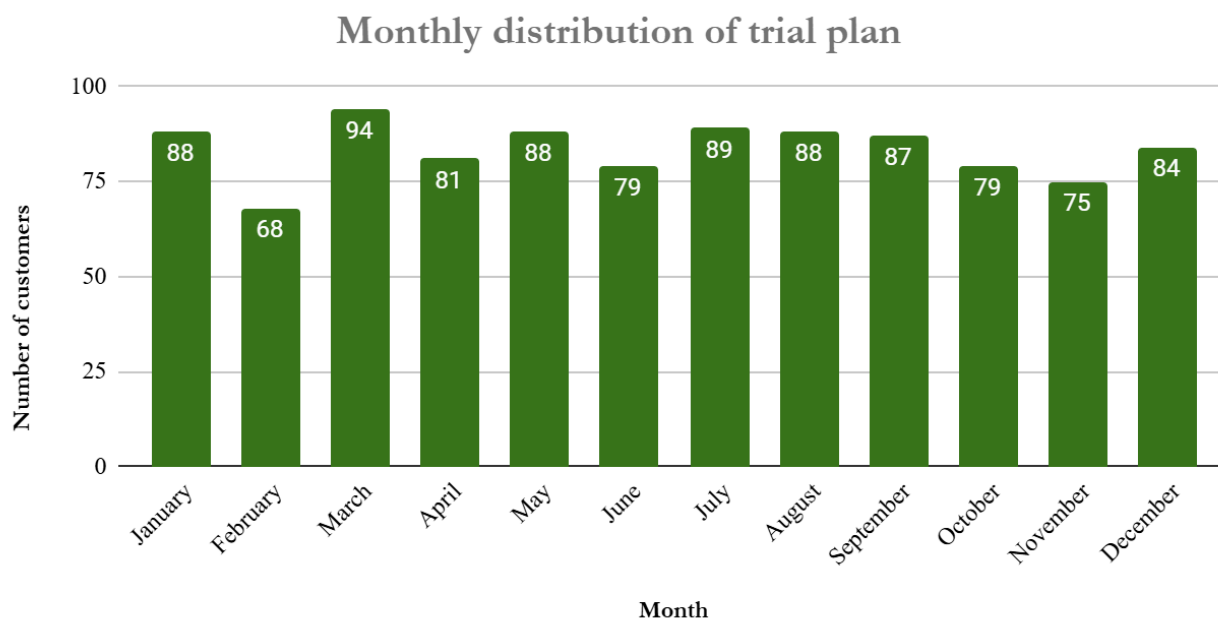
To understand customer behavior and improve business performance, we analyzed Foodie-Fi's subscription database, focusing on the following key areas:

1. Customer growth and distribution across different subscription plans.
2. Plan transitions after the initial free trial.
3. Customer churn rate and retention trends over time.
4. Upgrade patterns from basic to premium plans.

This analysis provides valuable insights into how customers interact with the platform, including their **subscription choices, retention tendencies, and revenue-driving behaviors**.

After running SQL queries on the Foodie-Fi database, we identified the following key insights:

## 1. Customer growth and trial distribution



*Figure 1: Monthly distribution of trial plan*

Foodie-Fi's customer growth and trial distribution remained steady throughout 2020, with a total of **1,000 unique customers** subscribing to at least one plan. The number of trial signups was relatively consistent across the months, reaching its highest in March (94 customers) and its lowest in November (75 customers). This pattern suggests that Foodie-Fi experiences stable customer acquisition with minor seasonal fluctuations, which could be leveraged for strategic marketing efforts.

## 2. Subscription plan preferences after trial

### Number and percentage of customer plans after initial free trial

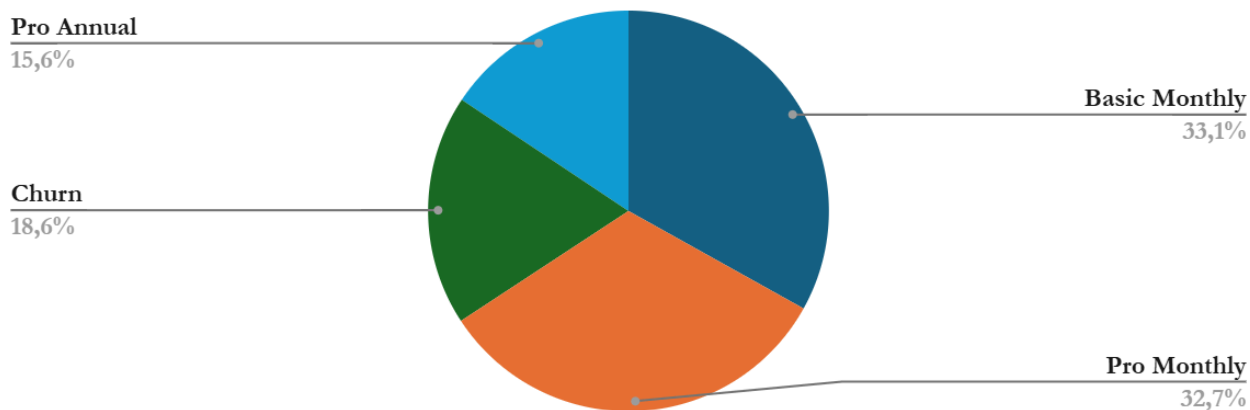


Figure 2: Number and percentage of customer plans after the first free trial

Since some customers transitioned through multiple plans after their trial, the total number of plan signups (1,650) exceeds the total number of unique customers (1,000).

After the trial period, 1,650 plan sign ups were recorded, indicating that many customers transitioned between different subscription plans multiple times. The Basic Monthly plan (546 signups, 33.1%) was the most popular choice, closely followed by Pro Monthly (539 signups, 32.7%). However, a significant 18.6% of customers (307 signups) churned immediately after the free trial, meaning they did not convert to a paid subscription. The Pro Annual plan had 258 signups (15.6%), suggesting that while some customers preferred a long-term commitment, it was not the most popular choice.

### 3. Churn rate and customer retention

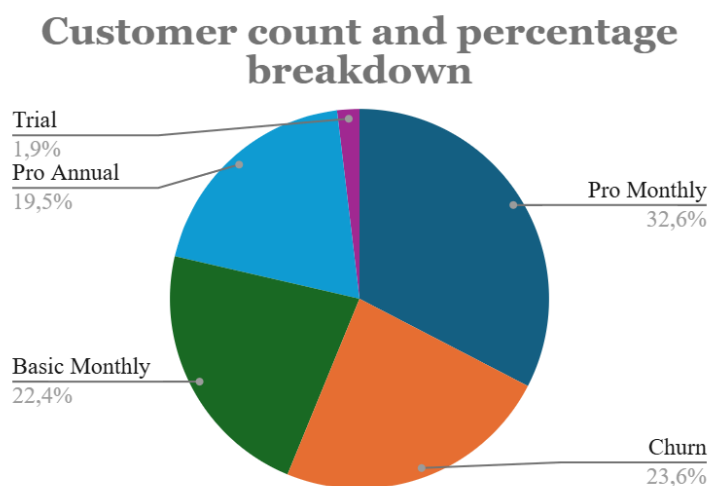


Figure 3: Customer count and percentage breakdown of all 5 plan\_name values at 2020-12-31

Customer churn rate and retention remain critical concerns. By the end of 2020, 23.6% of all customers had churned, making it the second-largest group after Pro Monthly subscribers. The fact that 30.7% of trial users churned immediately highlights a potential weakness in retaining trial customers. These findings suggest an opportunity to reduce early churn by offering better incentives, enhancing content, or optimizing the onboarding experience to encourage more users to continue their subscriptions.

### 4. Upgrade and downgrade trends

In 2020, a total of **214 customers downgraded** from the Pro Monthly plan to the Basic Monthly plan. This suggests that a significant number of users found the higher-tier plan either too

costly or not valuable enough to justify continuing at that level. Instead of canceling their subscriptions entirely, they opted for a more affordable plan, indicating that they still saw value in Foodie-Fi's offerings but preferred a lower-priced option.

This downgrade trend highlights potential concerns with the Pro Monthly plan's pricing and feature set. Customers may not have perceived enough added benefits compared to Basic Monthly, leading them to switch. Additionally, financial constraints or changing content preferences could also have influenced their decision.

Looking at upgrade and downgrade trends, most customers who upgraded moved from Basic Monthly to either Pro Monthly or Pro Annual *within the first few months*. On average, customers took 60–90 days to upgrade to Pro Annual, indicating that they often tested lower-tier plans before committing to a long-term subscription. Some customers also downgraded from Pro Monthly to Basic Monthly, suggesting that pricing or the perceived value of premium features played a role in customer retention decisions.

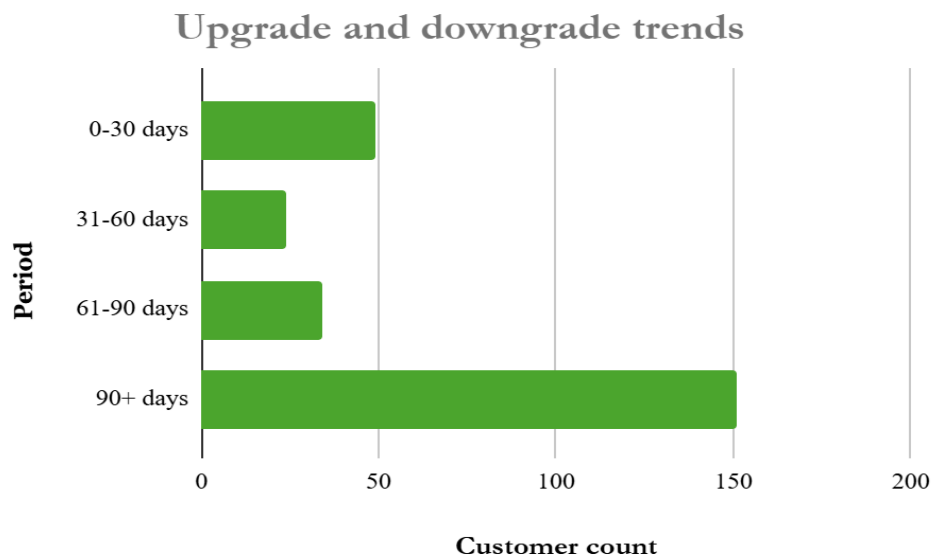


Figure 4: Days on average for a customer to an annual plan from the day they join Foodie-Fi (30 day periods)

## 5. Revenue Optimization Opportunities

Finally, in terms of revenue optimization opportunities, the Pro Monthly plan had the highest retention rate at 32.6%, making it the key revenue driver for Foodie-Fi. However, the lower conversion rate to Pro Annual (25.8%) suggests that there is room for improvement in promoting long-term subscriptions.



Understanding why customers downgrade or churn will be essential for optimizing pricing strategies and enhancing overall customer retention. Implementing targeted promotions, personalized recommendations, and exclusive long-term benefits could improve user engagement and increase revenue sustainability.

## CONCLUSION

To improve its business performance, *Foodie-Fi should focus on reducing churn, encouraging plan upgrades, and increasing long-term subscriptions.* The high churn rate after the free trial suggests that many users do not see enough value to continue. To address this, Foodie-Fi can enhance the trial experience by offering personalized recommendations, targeted discounts, or limited-time offers before the trial ends.

*Encouraging more users to switch from Pro Monthly to Pro Annual* is another opportunity for growth. Introducing exclusive benefits, limited-time upgrade discounts, or bundled content could make the annual plan more appealing. Since most users take 60–90 days to upgrade, offering early upgrade incentives may help speed up this transition.

Additionally, some users downgrade from Pro Monthly to Basic Monthly, which could indicate *pricing concerns or a lack of perceived value in the premium plan.* Providing flexible pricing options, loyalty rewards, or customized retention offers could help maintain premium-tier customers and reduce revenue loss.

To maximize customer engagement and revenue, *Foodie-Fi should leverage data insights to personalize offers and improve customer retention strategies.* Using targeted email campaigns, tracking customer behavior, and collecting feedback from churned users can provide valuable insights into improving the platform. By enhancing customer experience and optimizing pricing strategies, Foodie-Fi can increase retention, drive revenue growth, and strengthen its position in the competitive subscription market.

## REFERENCES

Ma, D. (2021, May 18). Case study #3 - Foodie-Fi. *8 Week SQL Challenge*.  
<https://8weeksqlchallenge.com/case-study-3/>