



Codeflix Churn Rate

Learn SQL from Scratch

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Get Familiar With Codeflix

Codeflix Operation Time

Codeflix has been operating for 4 months. The company started operating December 1st 2016 and the last reported day was march 31st 2017.

- The start date is determined from finding the minimum of the subscription_start dates.
- The end date is found by choosing the higher value out of the maximum of subscription_start and subscription_end. Both fields are checked in case there isn't a cancellation or a new subscription on the end date.

min(subscription_start)	max(subscription_start)	max(subscription_end)
2016-12-01	2017-03-30	2017-03-31

Months where Churn Rate is Calculated

There's enough information to calculate churn rate for January, February, and March.

- Churn Rate is the number of customers who cancel a service divided by the total number of customers using the service over a given unit of time.
- The churn rate is calculated on a per month basis. The number of subscriptions is determined by counting the number of active users at the beginning of the month. The number of canceled users is determined by counting the number of users that canceled throughout the month.
- Codeflix users cannot cancel their subscription until 1 month after signup so every user that starts will be active at least 1 month after their signup date.
- Since there are no cancellations in December, a churn rate can't be calculated for that month.
- The number of active users at the beginning of the month is the number of active users used to calculate churn rate.
- Any user that cancels during a month will be counted as a canceled user in the churn rate.

User Segments

There are users in segment 30 and segment 87.

- These segments can be found by looking at the segment column in the subscriptions list. The segments can also be found by selecting the distinct segment values from the subscription list.

ID	Subscription_Start	Subscription_End	Segment
11	2016-12-01	2017-01-17	87
12	2016-12-01	2017-02-07	87
13	2016-12-01		30
14	2016-12-01	2017-03-07	30
15	2016-12-01	2017-02-22	30

```
SELECT *  
      FROM subscriptions  
      LIMIT 100; /*code for full list*/  
  
SELECT DISTINCT segment  
      FROM subscriptions; /*find distinct  
segments*/
```

Churn Rate By Month

Churn Rate Trends

- The Churn Rate is around 25 to 30 percent for segment 87 users and 7 to 10 percent for segment 30 users. The churn rate increased in the month of march for both segments.
- The churn rates were found by cross joining a months table, creating columns if users are active at the beginning of the month for each group, and showing if a user cancels during the month for each segment.
- The number of active and canceled users are found by grouping the appended table by month and summing the added active and canceled columns for each segment.

Month	Churn_87	Churn_30
2017-01-01	0.2509	0.07560
2017-02-01	0.2756	0.07037
2017-03-01	0.3399	0.1080

Compare Churn Rates Between Segments

Churn Rate Conclusioin

- The company should focus on expanding the segment 30 users because they are able to retain the users in this segment more easily compared to segment 87.
- If more people are exposed to segment 30, the users are more likely to keep their subscription and will result in more revenue from each user on average.

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