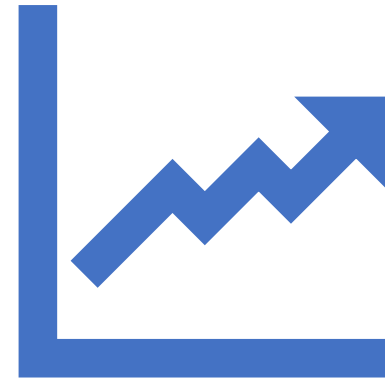


Telecom Churn Case Study

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INTRODUCTION

- Churn prediction in telecom is the process of identifying customers who are likely to switch to another service provider and taking actions to prevent or reduce this churn. Churn prediction is important for telecom companies because it can help them retain their existing customers, increase their revenues, and reduce their costs.
- Some of the common features that are used to predict customer churn are demographic information, usage patterns, service quality, customer satisfaction, loyalty programs, and social network analysis.



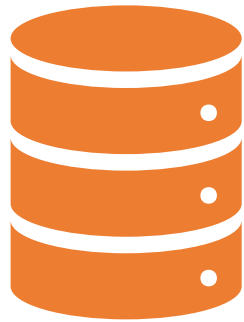
PROJECT OBJECTIVE

This project is based on the Indian and Southeast Asian market.

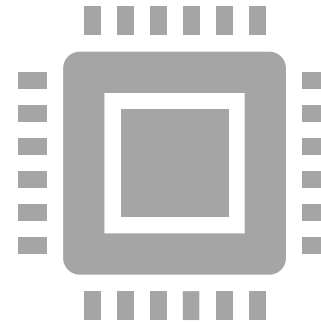
To predict and highlight main factors affecting customer churn,

Use ML models to build prediction models and recommend strategies to manage customer churn based on your observations

DATASET



The dataset contains customer-level information for a span of four consecutive months - June, July, August and September. The months are encoded as 6, 7, 8 and 9, respectively.



The business objective is to predict the churn in the last (i.e. the ninth) month using the data (features) from the first three months. To do this task well, understanding the typical customer behaviour during churn will be helpful.



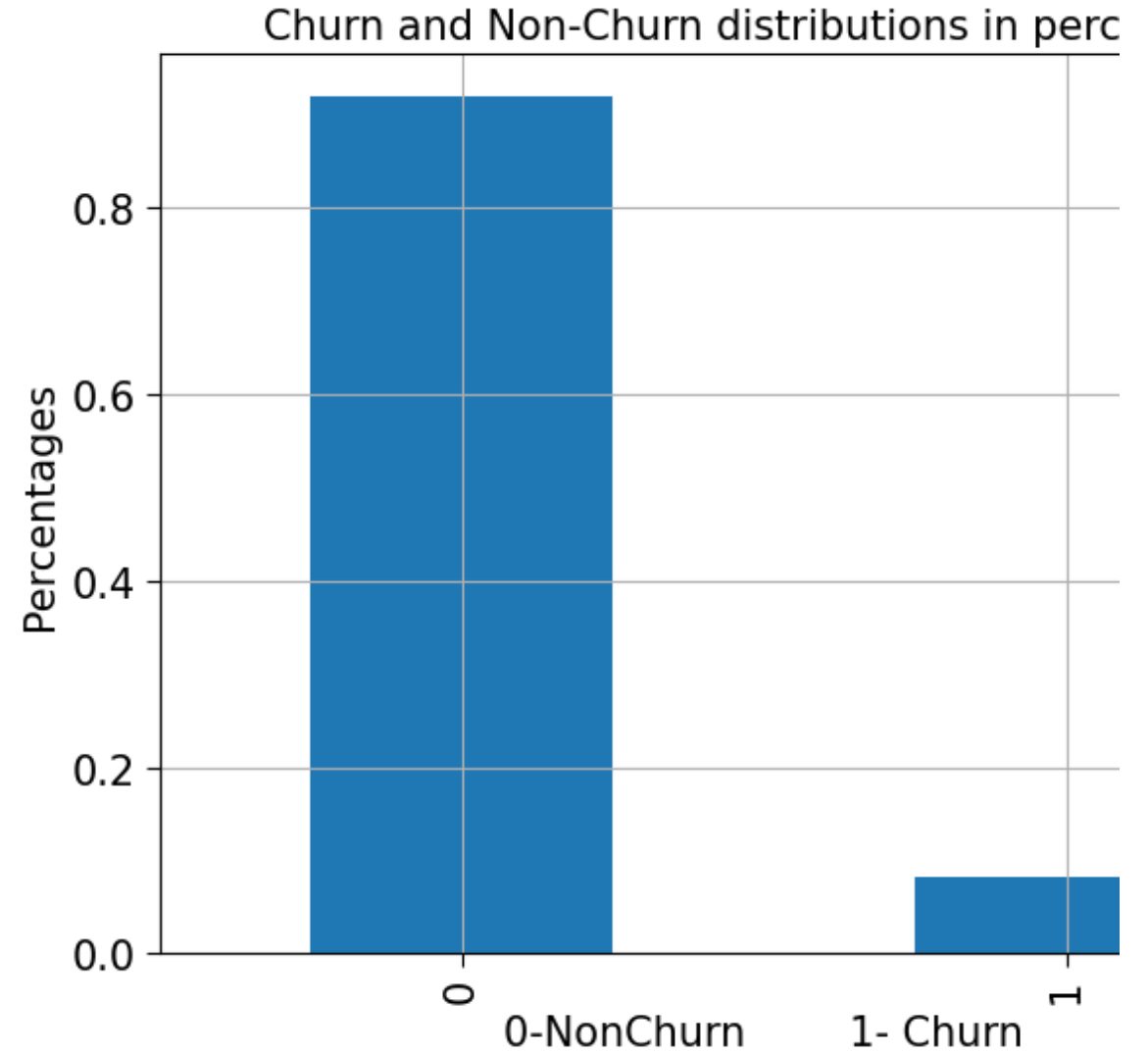
UNDERSTANDING CUSTOMER BEHAVIOUR DURING CHURN

In churn prediction, we assume that there are three phases of the customer lifecycle :

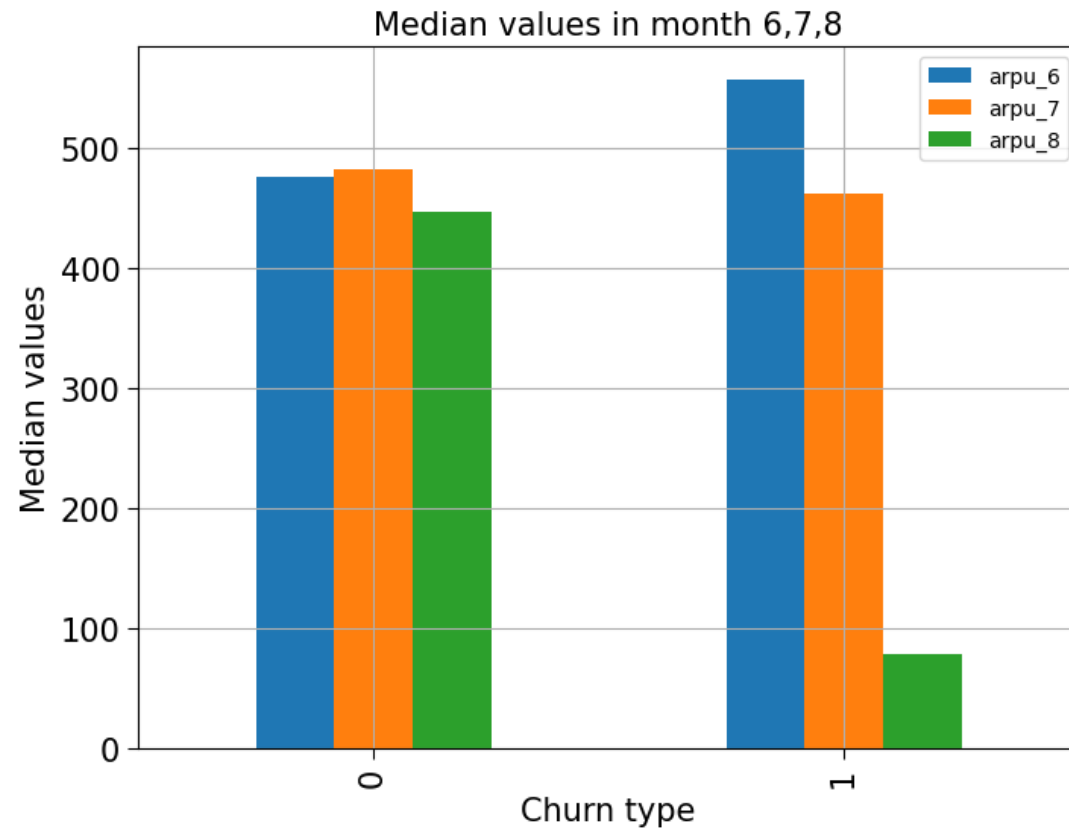
- The 'good' phase: In this phase, the customer is happy with the service and behaves as usual.
 - The 'action' phase: The customer experience starts to sore in this phase, for e.g. he/she gets a compelling offer from a competitor, faces unjust charges, becomes unhappy with service quality etc. In this phase, the customer usually shows different behavior than in the 'good' months.
 - The 'churn' phase: In this phase, the customer is said to have churned.
-

OBSERVATIONS

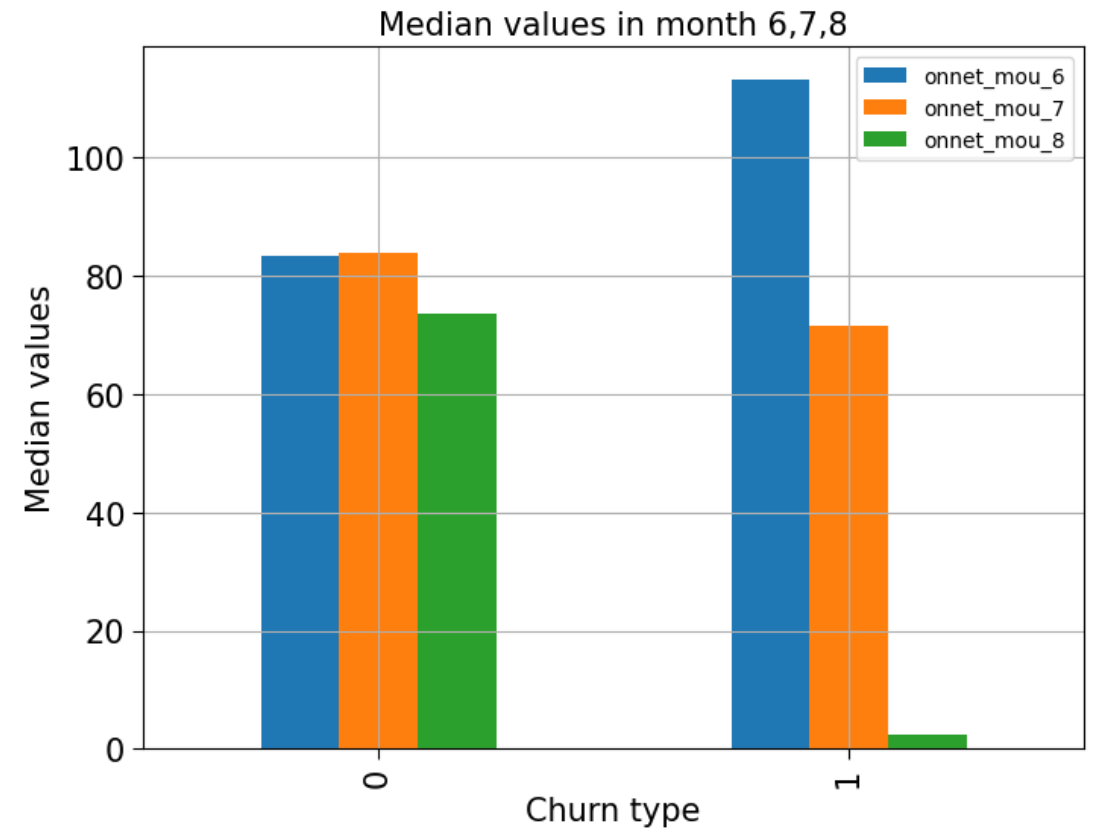
- 92% customers belong to non-churn and 8% customers belong to Churn type.

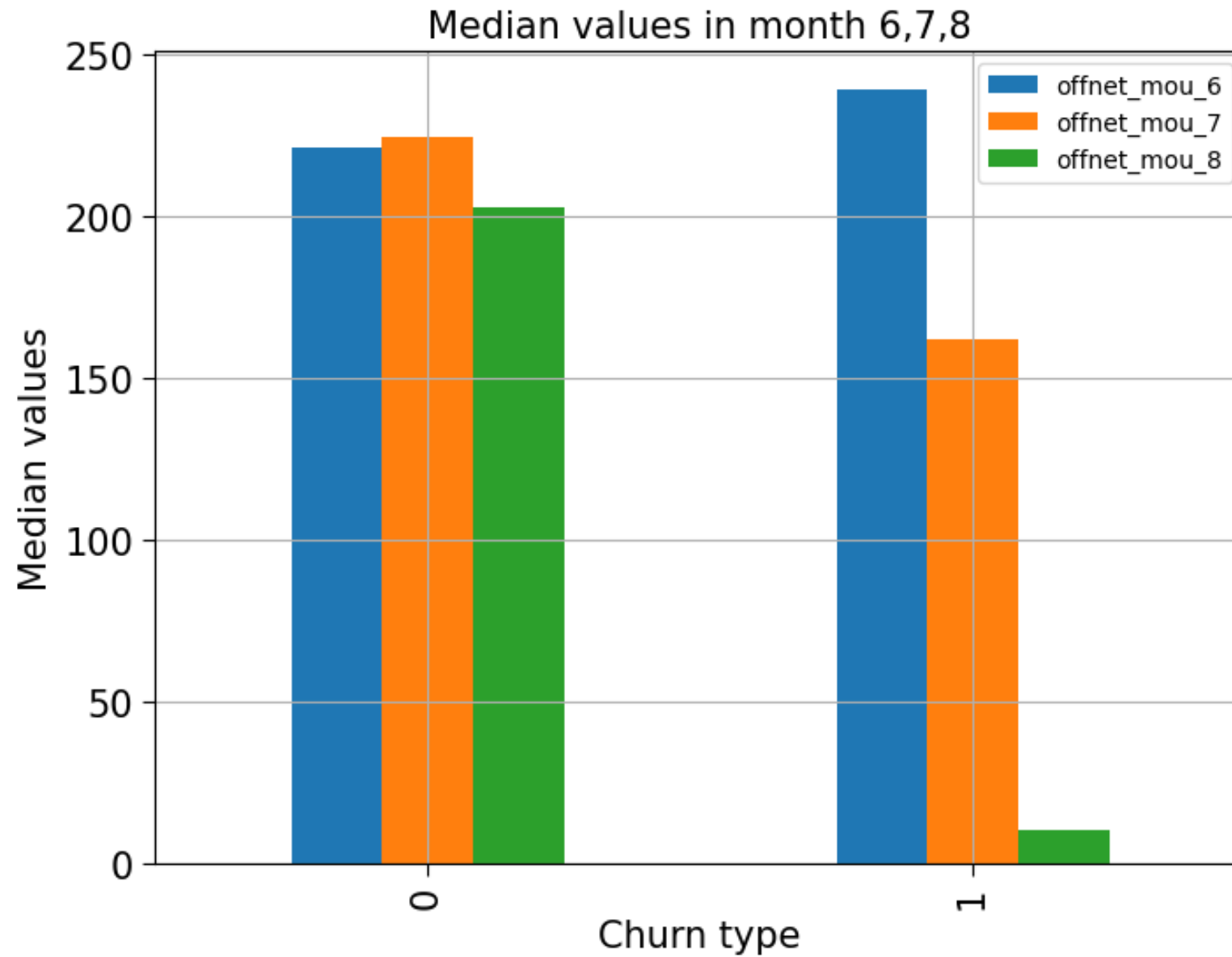


Average revenue per user more in month 6. If users are unsatisfied, they are more likely to churn

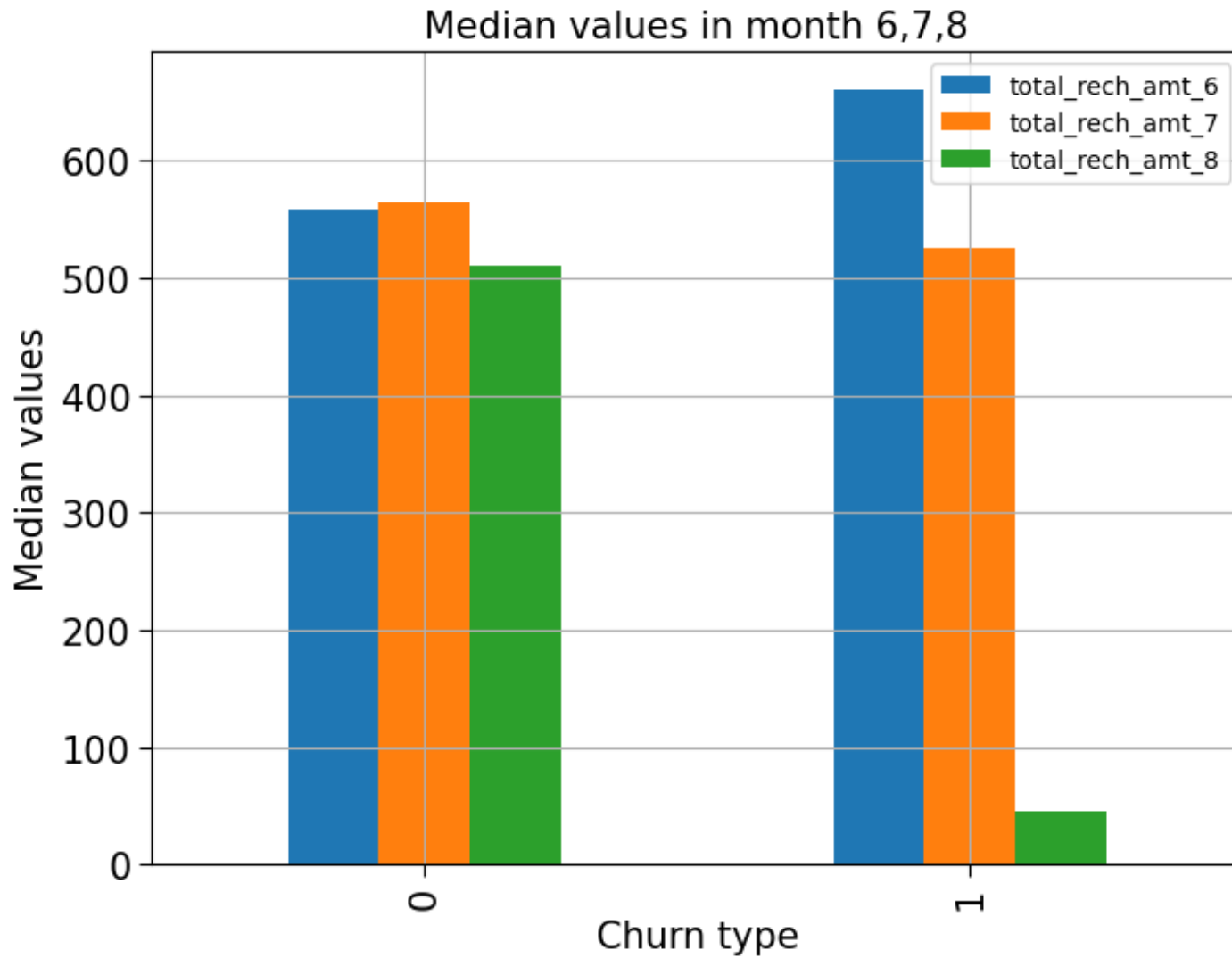


Users with less minutes of usage in month 8 are more likely to churn

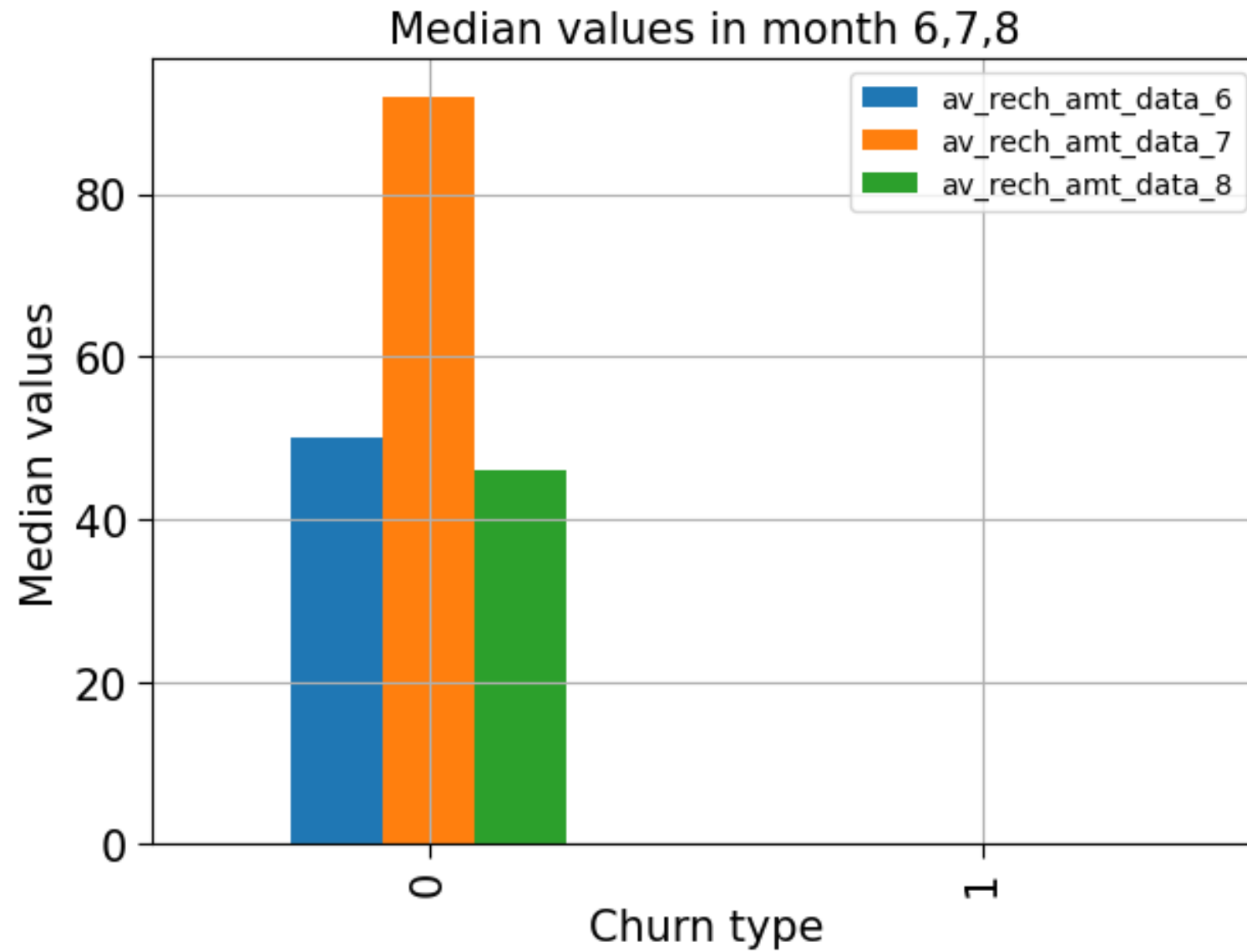




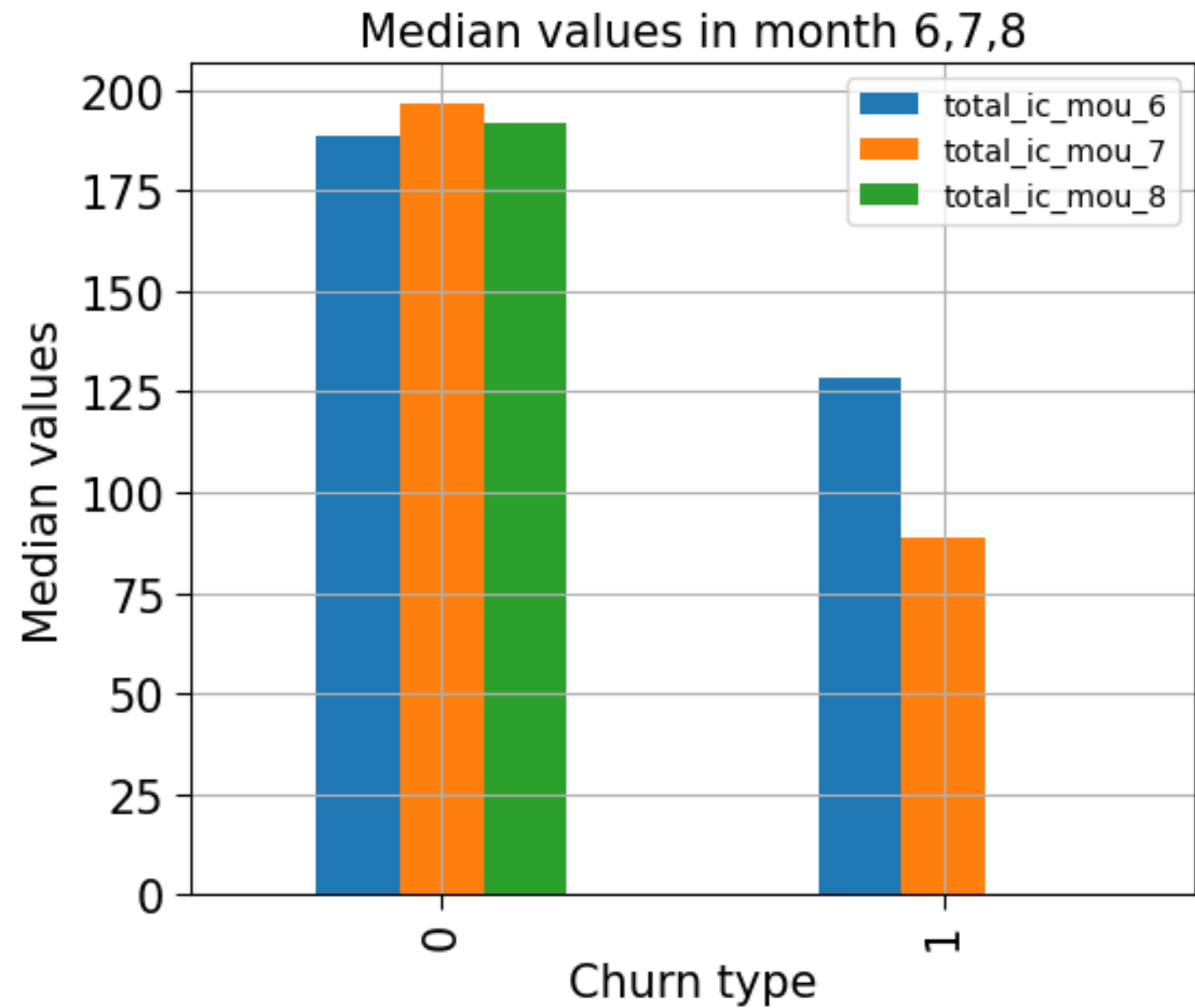
The users who have big difference of minutes of call duration to another network between month 6 and month 7, are likely to churn.



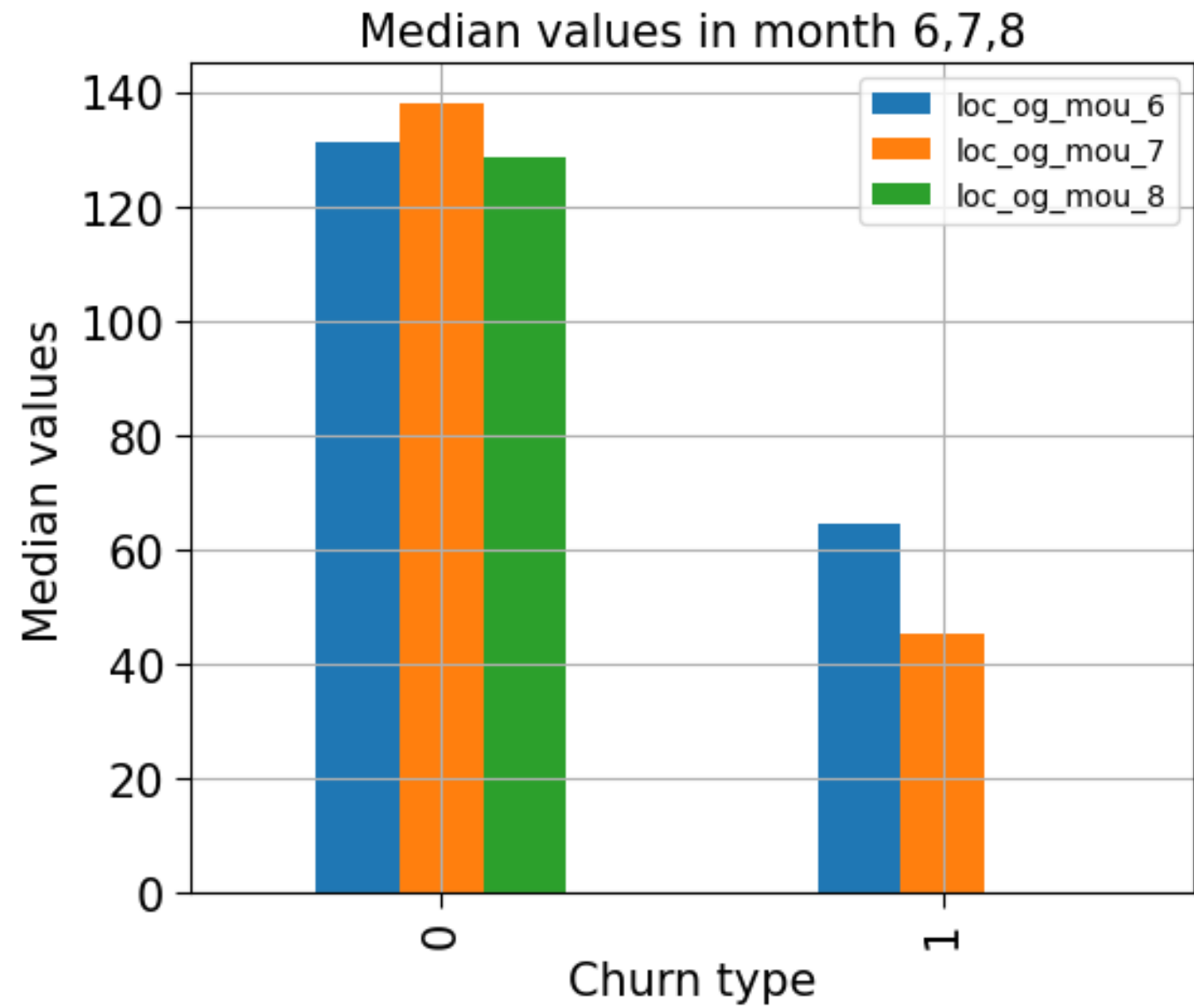
If the difference of total recharge amount is more for consecutive months, users are more likely to churn



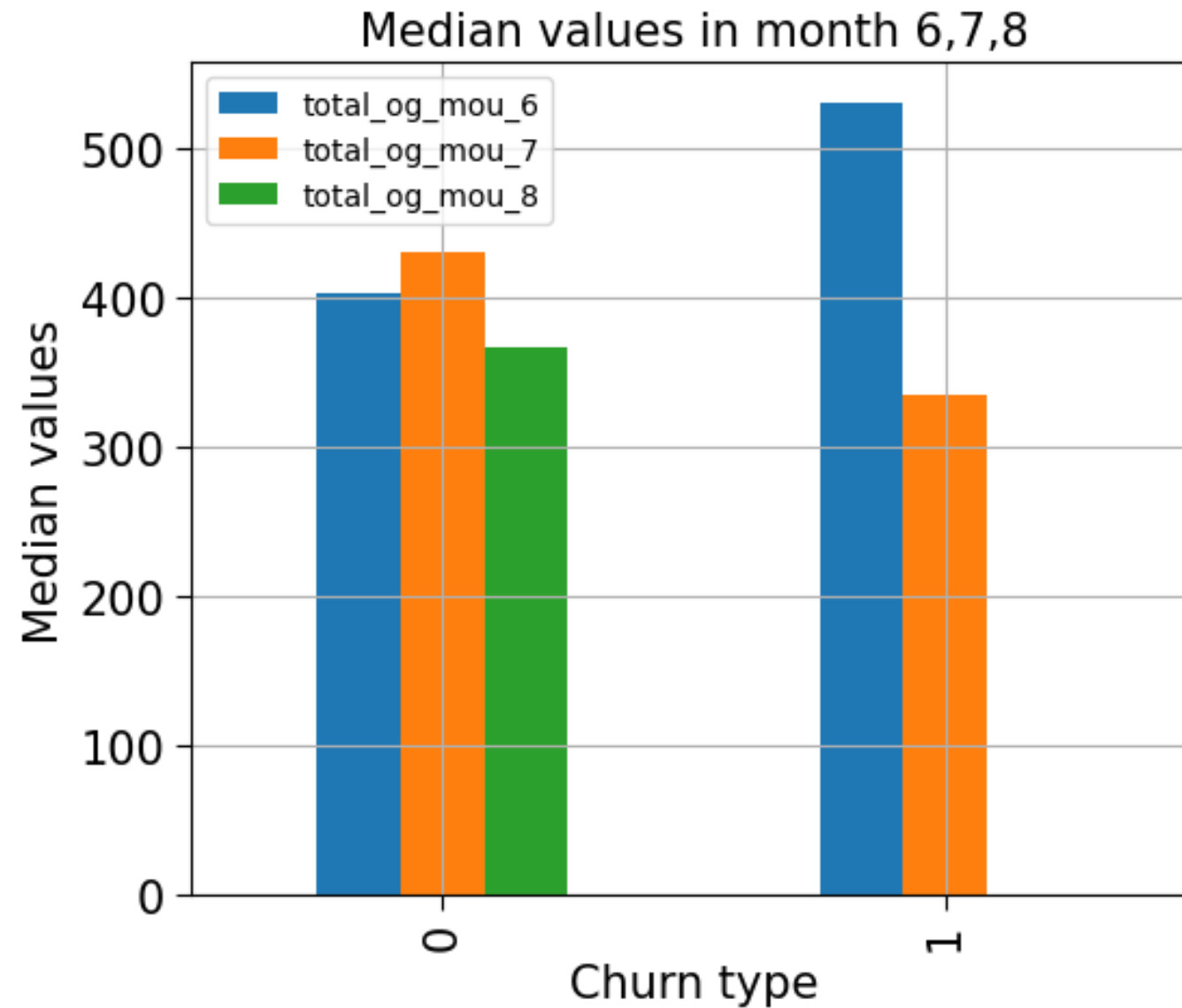
Average recharge amount in month 6,7,8 is none and those customer are more likely to churn



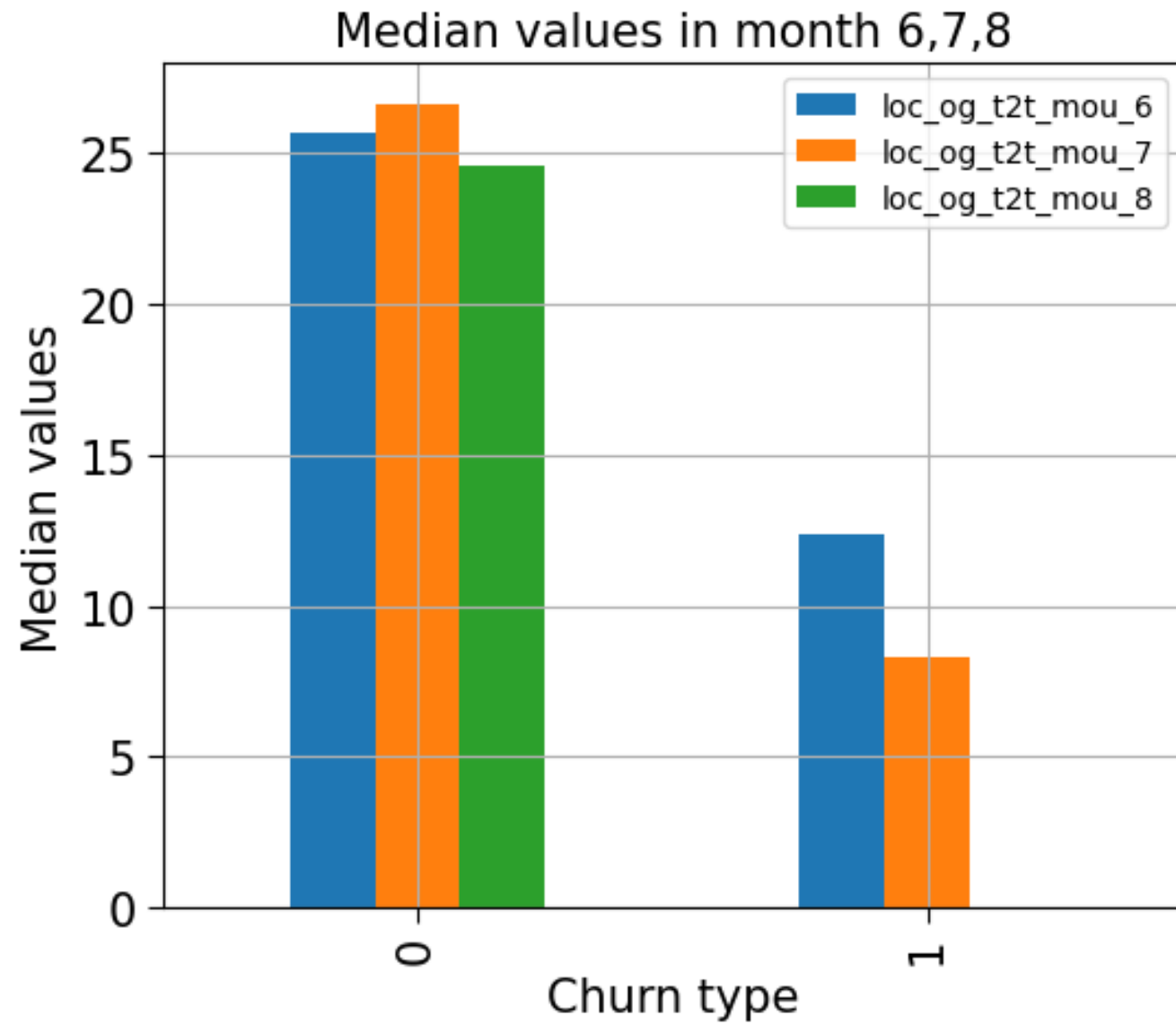
Users who have more difference in Total incoming minutes in month 6,7,8 are more likely to churn



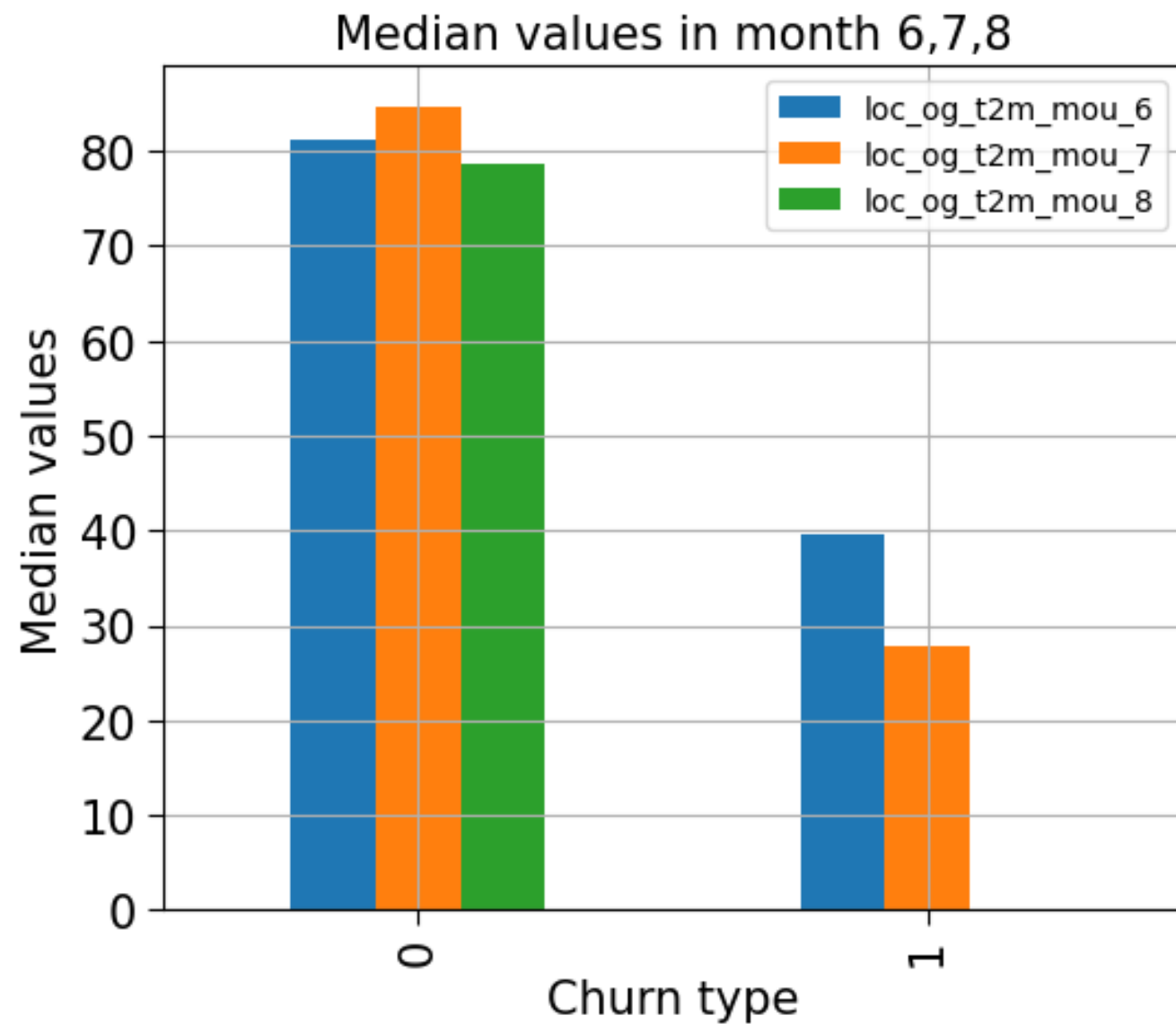
Local outgoing minute are less, users are more likely to churn



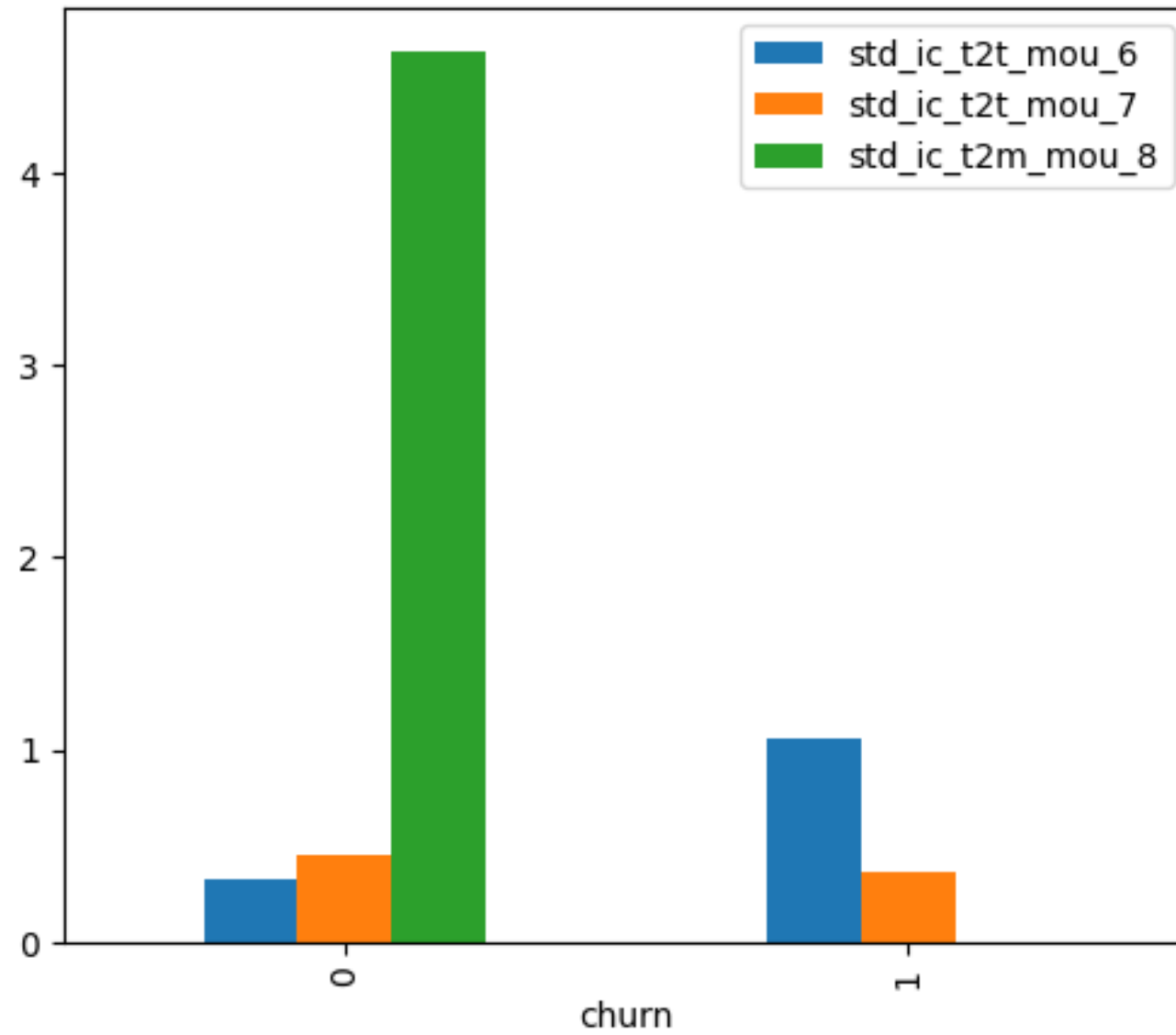
Total outgoing minute usage difference is more between month 6 and 7, users are more likely to churn



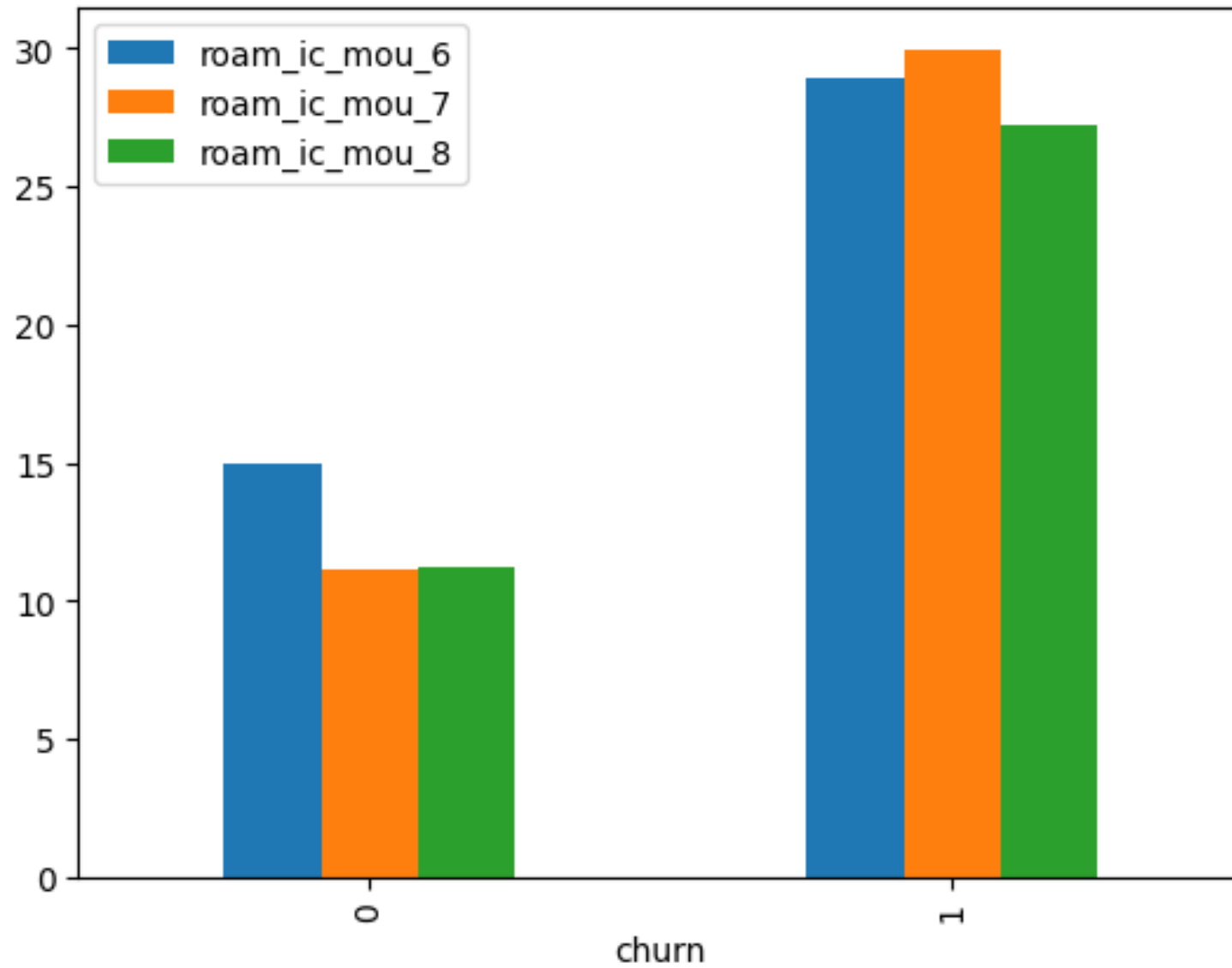
Local outgoing minute in same operator in month 6,7,8 are less, users are more likely to churn.



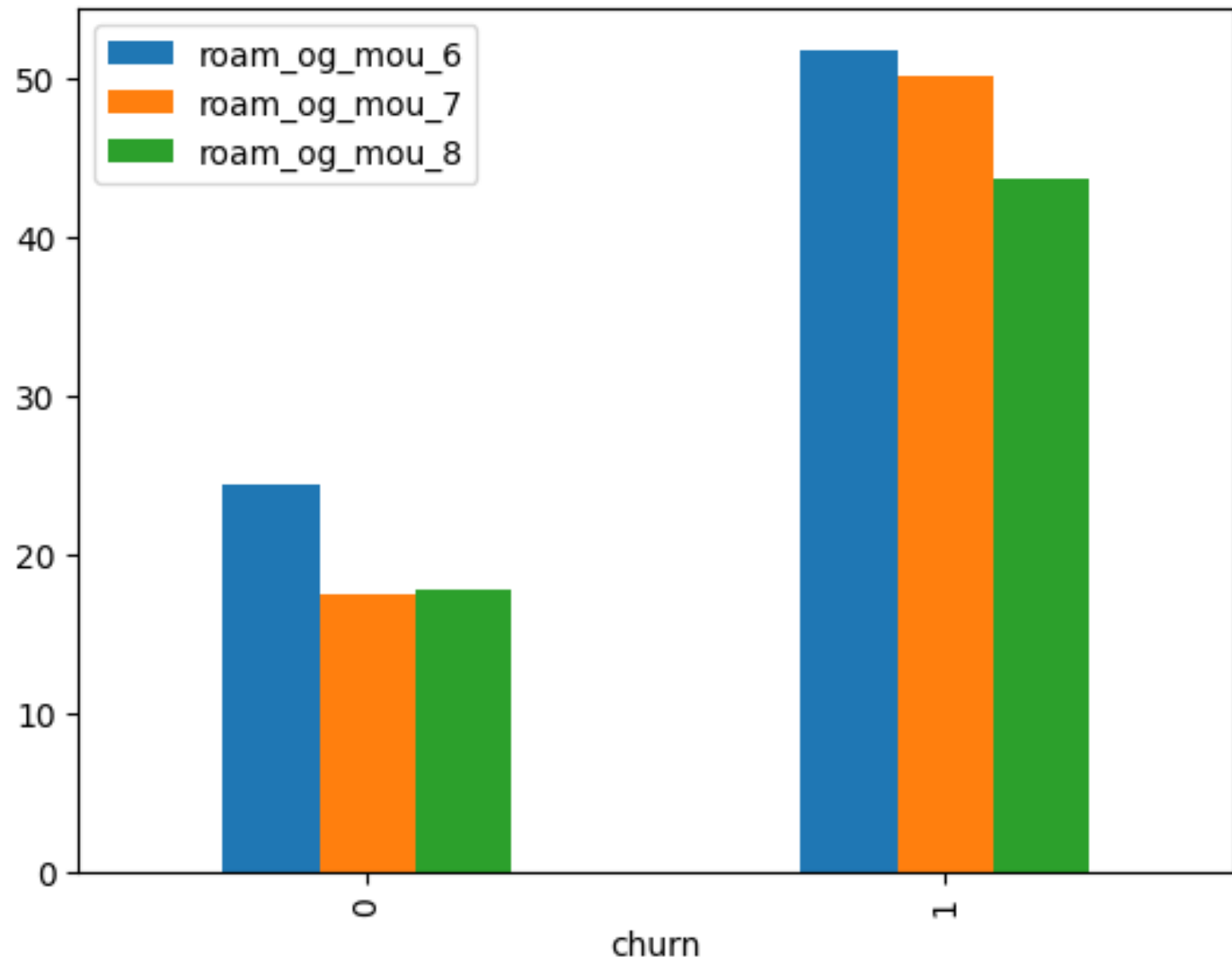
Local outgoing minute to another operator is less, more likely to churn



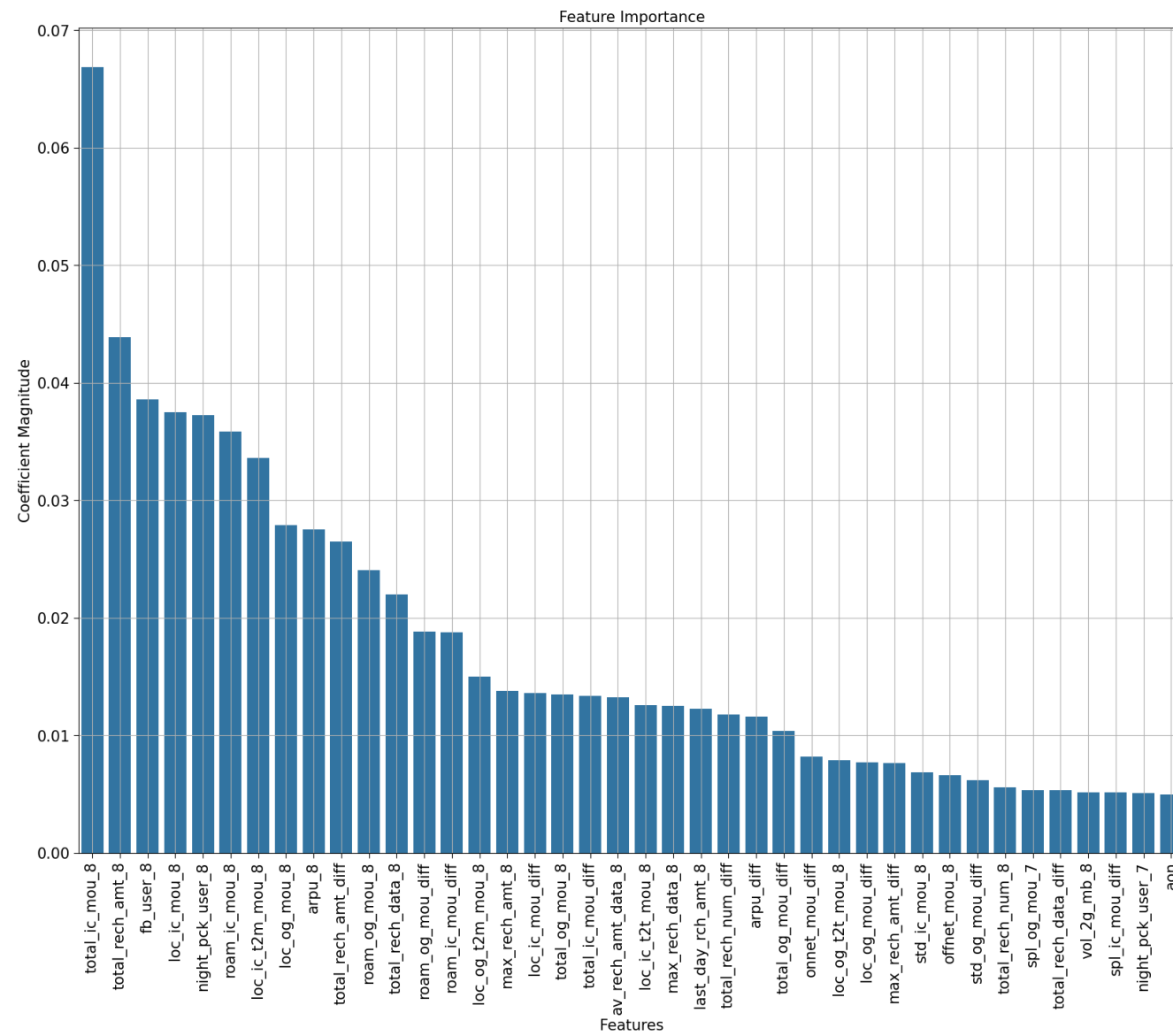
Users who are using more STD calls are more likely to churn.



Roaming in incoming minutes more, they are likely to churn more.



Roaming in outgoing minutes more, Users are more likely to churn.



The most important features that can affect the customer churn are mentioned as above

STRATEGIES TO MANAGE CUSTOMER CHURN

Roaming Rates: It is imperative for the telecom company to scrutinize their current roaming rates. There is a significant opportunity to enhance customer satisfaction and retention by offering competitive packages to those customers who frequently utilize services from a roaming zone.



STD and ISD Rates: The company should also turn its attention towards the Standard Trunk Dialing (STD) and International Subscriber Dialing (ISD) rates. There is a possibility that these rates are perceived as high by the customers. Introducing tailored STD and ISD packages could be a viable solution to this issue.



Customer Feedback: To address the issues effectively, it is recommended that the telecom company proactively collects and analyzes customer queries and complaints. This data will provide valuable insights into customer needs and preferences, enabling the company to refine their services accordingly. This customer-centric approach could significantly enhance the overall user experience and foster customer loyalty.