

# Customer churn case study

File created on: 9/21/2022 10:08:40 AM

created by : Foram Solanki

# Telco Churn and LTV Analysis

Services Analysis by Churn and Contract

Streaming services Analysis by Churn and Contract

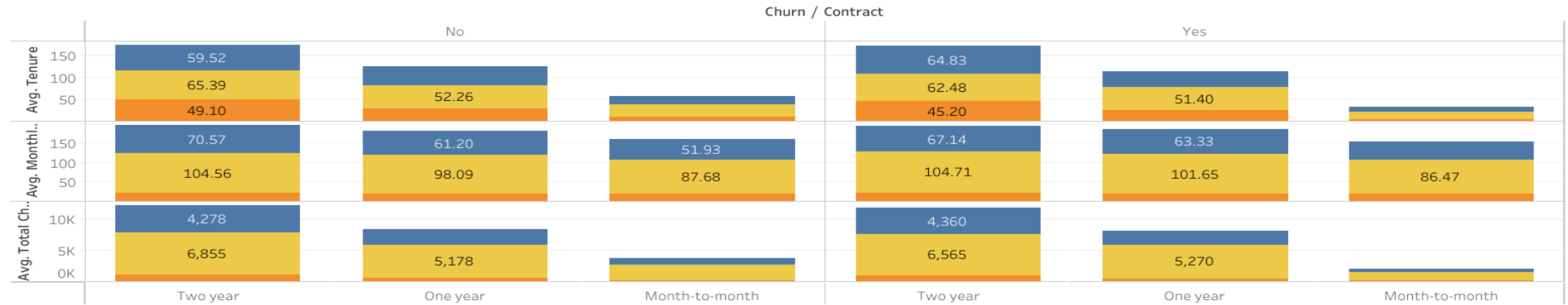
Contract Pattern by Charges and Tenure

Payment method pattern by Charges and Tenure

LTV by most Important Services and Contract

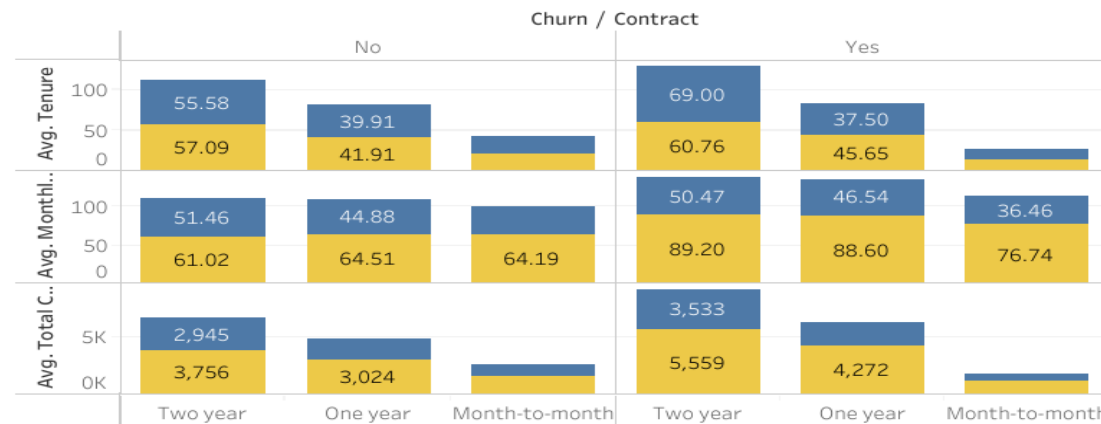
Internet Se.. DSL Fiber optic No

## Average Numerics by Contract and Internet



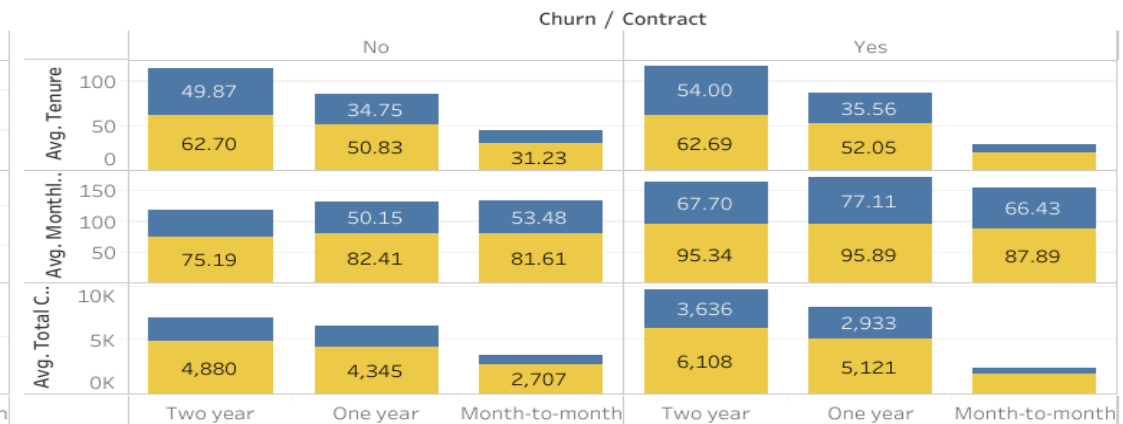
Phone Serv.. No Yes

## Average Numerics by Contract and Phone Service



Multiple Li.. No Yes

## Average Numerics by Contract and Multiple Lines



# Telco Churn and LTV Analysis

Services Analysis by Churn and Contract	Streaming services Analysis by Churn and..	Contract Pattern by Charges and Tenure	Payment method pattern by Charges a..	LTV by most Important Services and Contract
-----------------------------------------	--------------------------------------------	----------------------------------------	---------------------------------------	---------------------------------------------

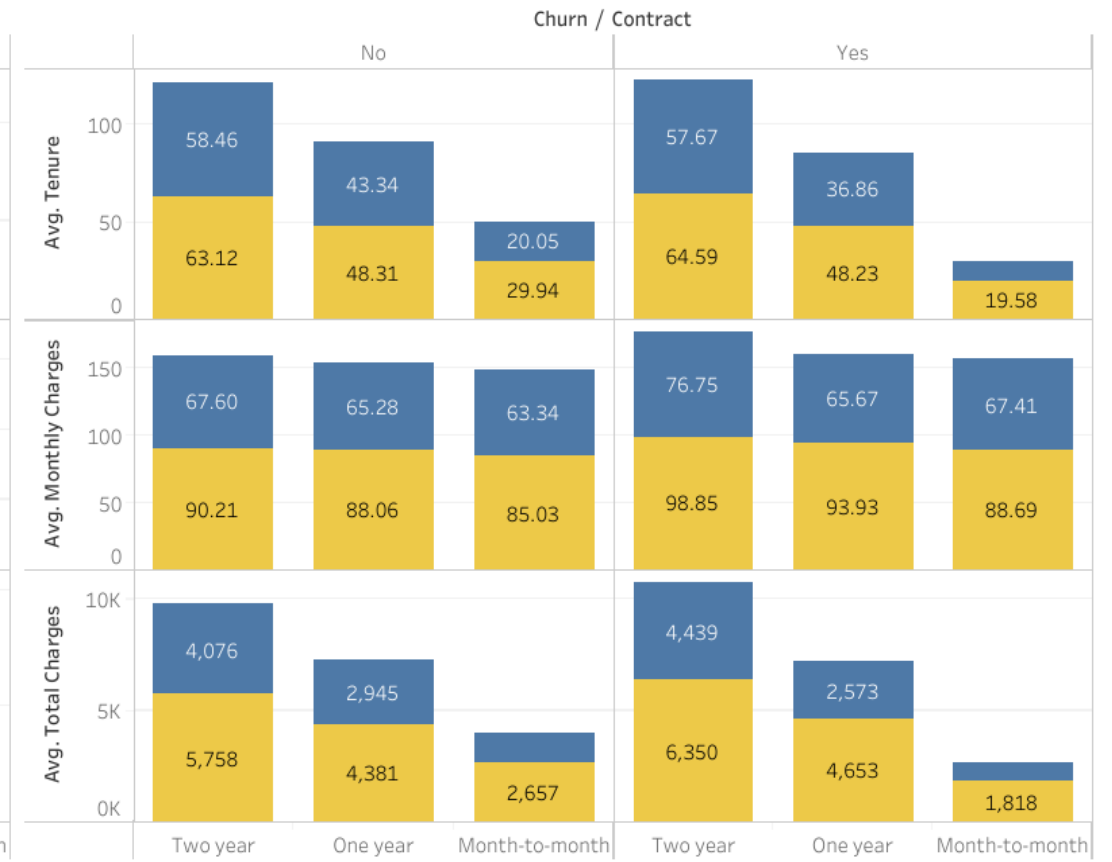
Streaming .. ■ No ■ Yes

## Average Numerics by Contract and Streaming TV



Streaming .. ■ No ■ Yes

## Average Numerics by Contract and Streaming Movies



## Telco Churn and LTV Analysis



Services Analysis by  
Churn and Contract

Streaming services  
Analysis by Churn and  
Contract

Contract Pattern by  
Charges and Tenure

Payment method  
pattern by Charges  
and Tenure

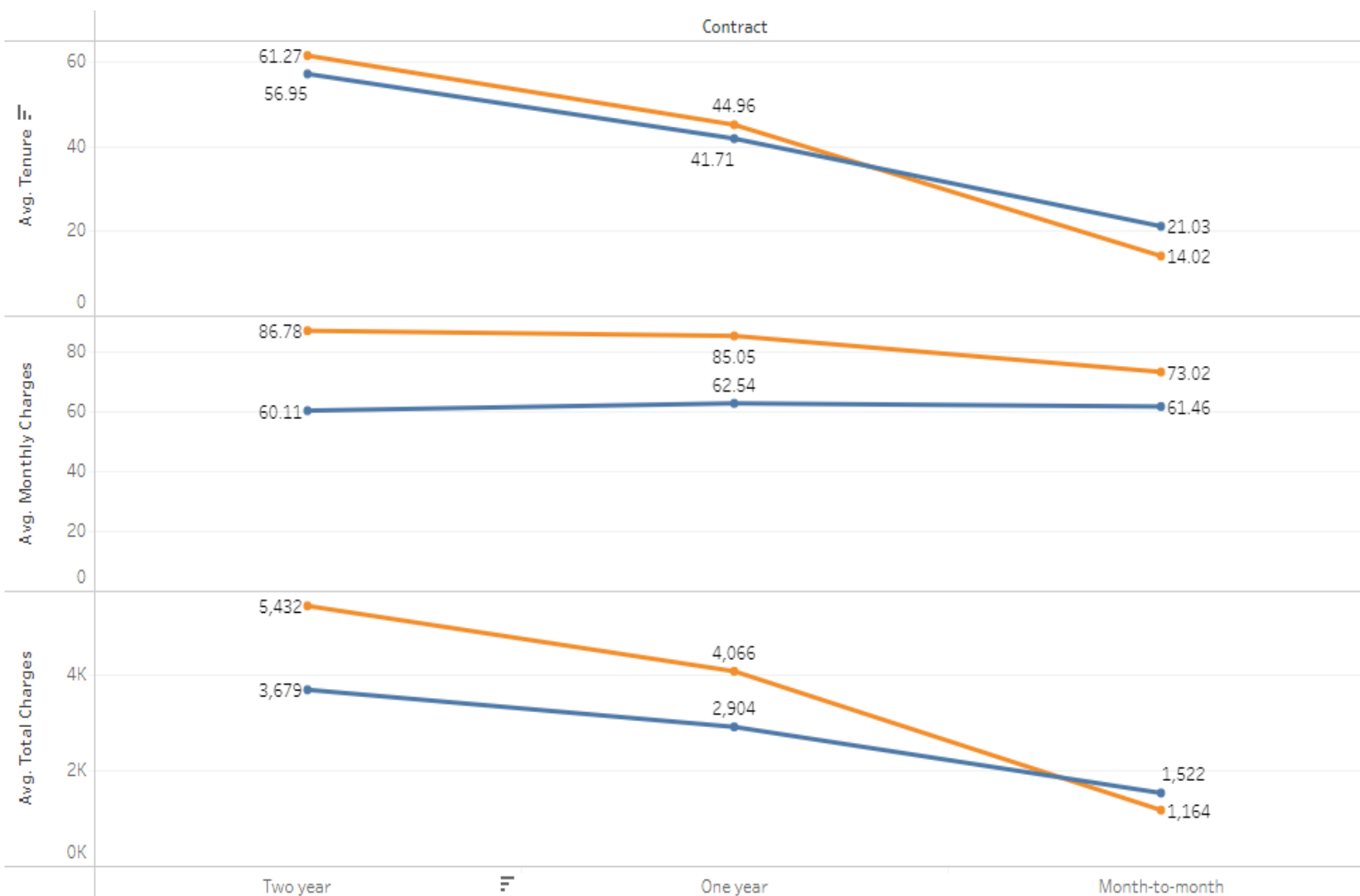
LTV by most Important  
Services and Contract



Churn

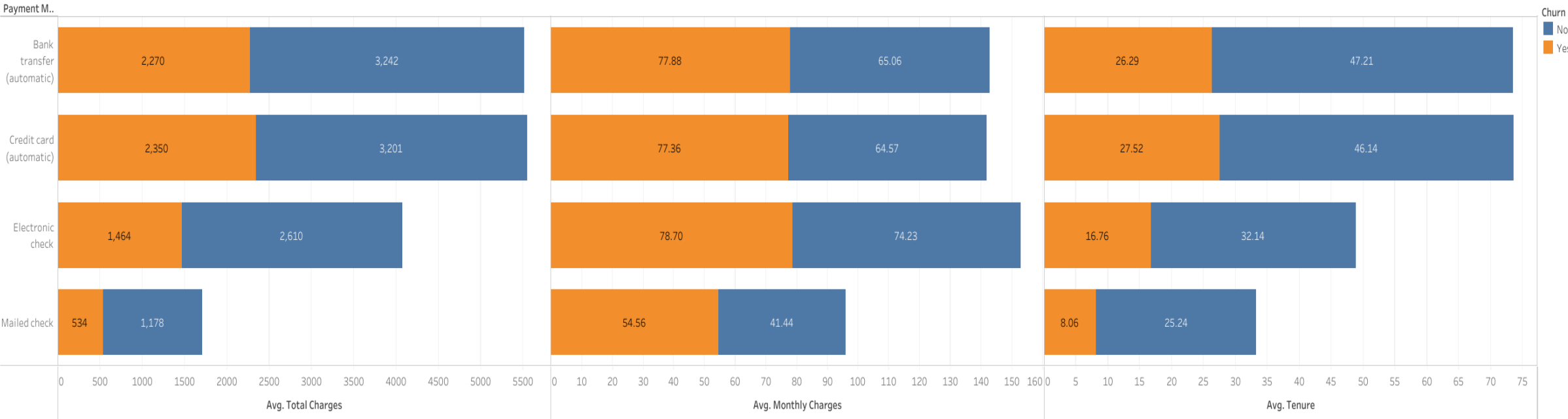
No

Yes



Telco Churn and LTV Analysis

Services Analysis by Churn and Contract	Streaming services Analysis by Churn and...	Contract Pattern by Charges and Tenure	Payment method pattern by Charges a..	LTV by most Important Services and Contract
-----------------------------------------	---------------------------------------------	----------------------------------------	---------------------------------------	---------------------------------------------



# Telco Churn and LTV Analysis

Services Analysis by  
Churn and Contract

Streaming services  
Analysis by Churn and..

Contract Pattern by  
Charges and Tenure

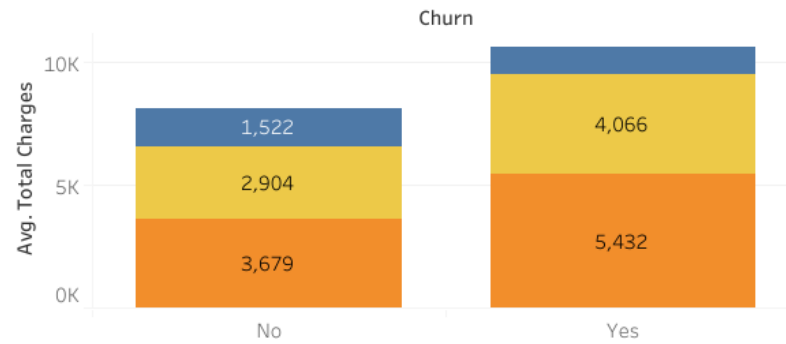
Payment method  
pattern by Charges a..

LTV by most Important  
Services and Contract

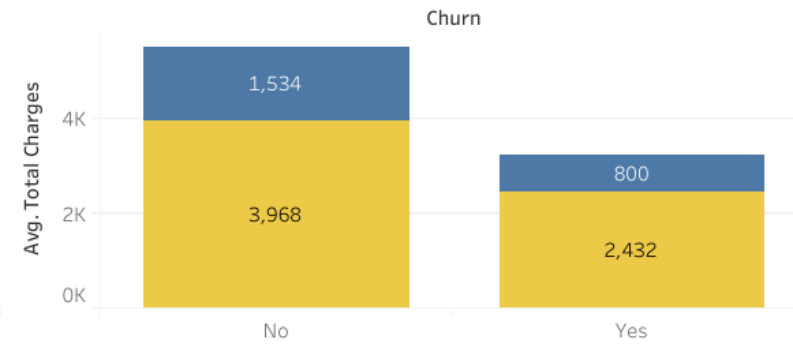
Contract    Month-to-month    One year    Two year

Multiple Li..    No    Yes

### Contract Ratio vs Average Total Charges by Churn



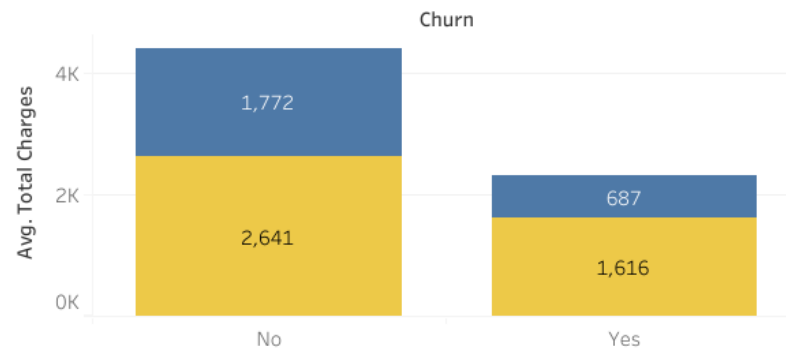
### Multiple Lines Ratio vs Average Total Charges by Churn



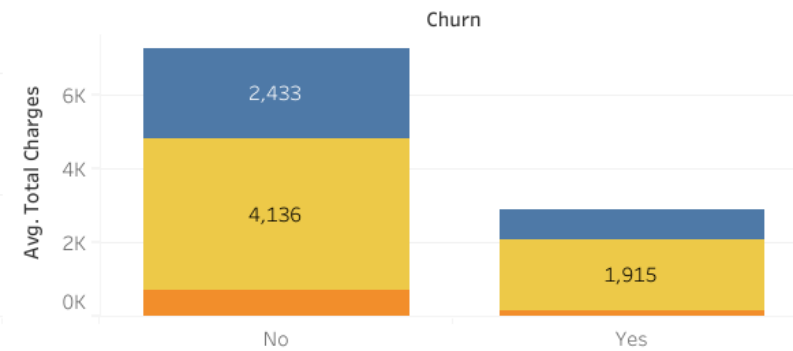
Phone Serv..    No    Yes

Internet Se..    DSL    Fiber optic    No

### Phone Service Ratio vs Average Total Charges by Churn



### Internet Service Ratio vs Average Total Charges by Churn



## short analysis of each dashboard

- Average numerics by contract and internet

- People leaving the company have paid more money in general when they have a 2-year contract.
- People who have a month-to-month contract are most likely to churn.
- People who have used phone services and multiple lines tend to pay more in general, but we saw that these customers tend to leave the company if they have to pay higher monthly charges.

- Streaming services analysis by churn and contract

- Customers subscribed to streaming movies and streaming TV were contributing more to revenue (high LTVs).
- Many customers subscribed to these services left the company as they had to pay higher monthly charges. So, customers are more likely to leave the company if we try to increase the LTV by increasing the monthly charges. Hence, the company can decide to check the effect that increasing LTV has on churn and then take a decision.

- Contract pattern by charges and tenure

- Having a 2-year contract is the best for having a high LTV and for retaining the customers for as long as possible.
- Customers with a month-to-month contract do not contribute much to LTV and are also more likely to churn.

- Payment method pattern by charges and tenure

- We should encourage customers to make more automatic payments because such people generally have higher LTVs and stay with us longer.

- LTV by the most important services and by contract

- We want to encourage customers to use 2-year contracts, internet services, phone services and multiple lines.

## key takeaways from this case study:

1. Using SQL with Python is a great idea if you have to build complicated business logics and if you want to have a single interface to run queries and perform analysis.
2. It is important to understand the business objectives and context prior to starting any type of analysis.
3. Concerning churn, saw that the most important variables related to it include contract, monthly charges, and some services (internet, phone, and multiple lines).
4. People who stay with a company longer normally lead to higher LTVs and enforcing 2- or 1-year contracts can help with this.
5. We can and must categorize people as having high and low LTVs.



[https://public.tableau.com/views/Customer\\_churn\\_case\\_study/Story1?:language=en-US&:display\\_count=n&:origin=viz\\_share\\_link](https://public.tableau.com/views/Customer_churn_case_study/Story1?:language=en-US&:display_count=n&:origin=viz_share_link)