

## 1. Objective

To deep dive into the reasons and variables associated with the high churn for Telco customers and recommend solutions to rectify the same.

## 2. Methodology

We have taken support of Tableau for data analysis & visualization. Our approach involved analyzing each independent variable against our dependent variable – Churn. Based on this basic analysis we shortlisted a few select variables which displayed a significant relationship with the dependent variable. We then clubbed the variables in a dashboard which helped us weave a story around the reasons for churn.

## 3. Observations/Insights

- We note that 26.54% customers have left the Telco services (Gender neutral).
- The churn rate for customers without partners is higher (33%) versus customers with partners (20%).
- The churn rate is higher for senior citizens (42%) versus non senior citizens (22%).
- The churn rate for customers opting for electronic check (45%) is significantly higher than others (<19%).
- Customers using paperless billing have higher churn rate (34%) than others (16%).
- The customers opting for month-to-month payment plans have the highest churn rate (42.7%).
- Customers who don't have online security and online backup have high churn rates (42% & 39.9%).
- Customers opting for fiber optics (Highest Price) have the highest churn rates (42%).
- The churn rate is higher for customer with lower tenure and is decreasing with increasing tenure.

**We observed that a few variables differed significantly for customers classified as senior citizens vs. non-senior citizens:**

- Among the senior citizens, the churn rate is very low when they take tech support.
- On opting for online backup, the churn rate falls from 40% to 22%. Whereas on opting for online security, it is falling from 42% to 15%.

- Further, the churn is almost double for senior citizens using paper-based billing as compared to non-senior citizens using the same.
- Also, the churn is higher among senior citizens contracting on a monthly basis compared to non-senior citizens with a similar plan.
- In case of DSL, the churn is higher amongst senior citizens as compared to non-senior citizens.

#### 4. **Recommendation**

- Investigate any issues associated with Fiber Optic internet service. One possible problem could be the high price of service.
- Incentivizing the customers to opt for longer contracts (as compared to the currently popular monthly plans) via sales promotion and bulk discount.
- Examining any potential problems related with electronic check payment and fixing them at the earliest
- Providing support to fresh customers in the initial months to build customer loyalty
- Focus on making the customer aware about online security and backup systems

**For senior citizens: Why are they important?** 25% of total customer base | High churn rate of 42%

#### **Recommended solutions:**

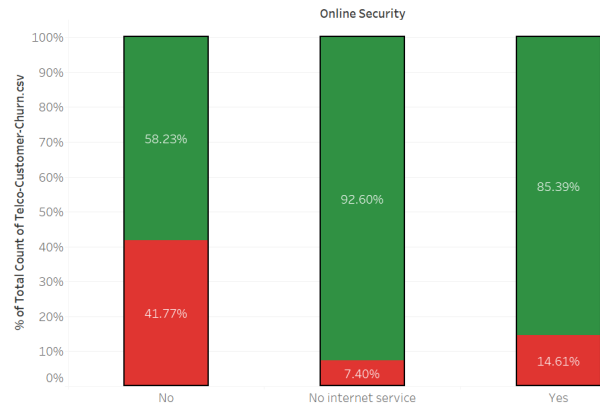
- As observed, the churn rate is lowest amongst those with tech support availability. Therefore, increasing the reach and access to tech support can be a key factor in bringing the churn down.
- Then since those who opted for paper-based billing have a higher churn, it could be an indicator of the inconvenience associated with paper-based billing. Hence, efforts can be directed towards introducing and promoting paper less billing amongst the elderly.

#### **Notes:**

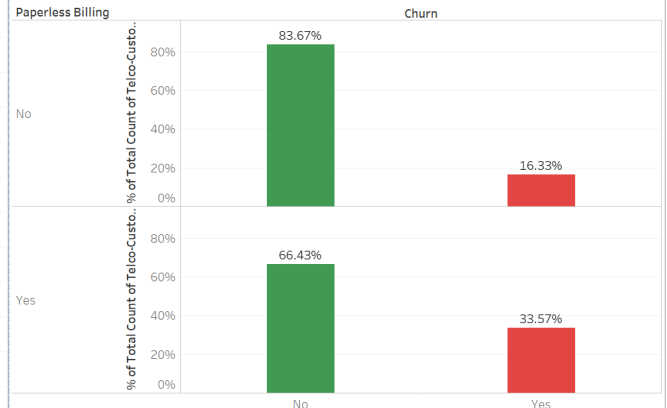
- We have provided our tableau file through tableau public link on GitHub, Please refer to dashboard as well as all the metadata
- Dashboard screenshots are also attached in next page

## Dashboard screenshots

### Security



### Paperless Billing



Count of Telco-C..

- 1,526
- 2,000
- 2,500
- 3,096

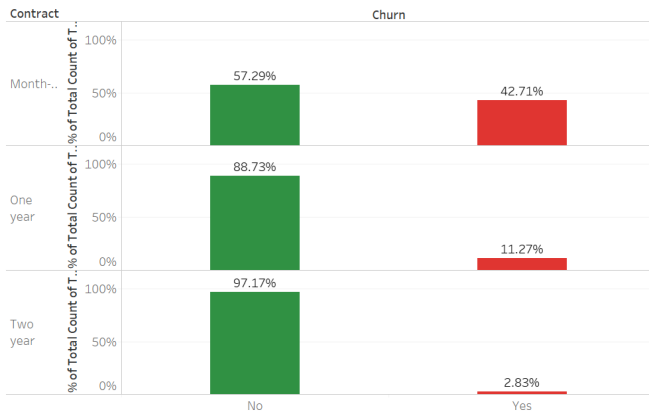
Churn

- No
- Yes

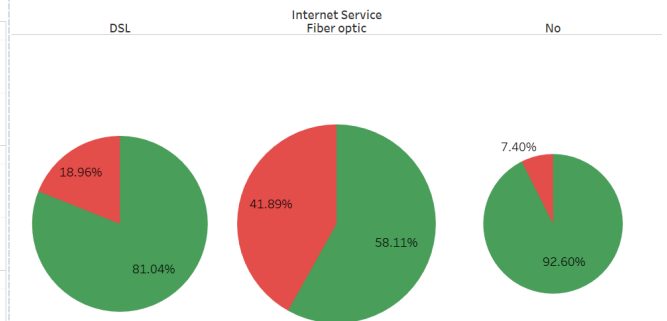
Senior Citizen (Y..

- (All)
- No
- Yes

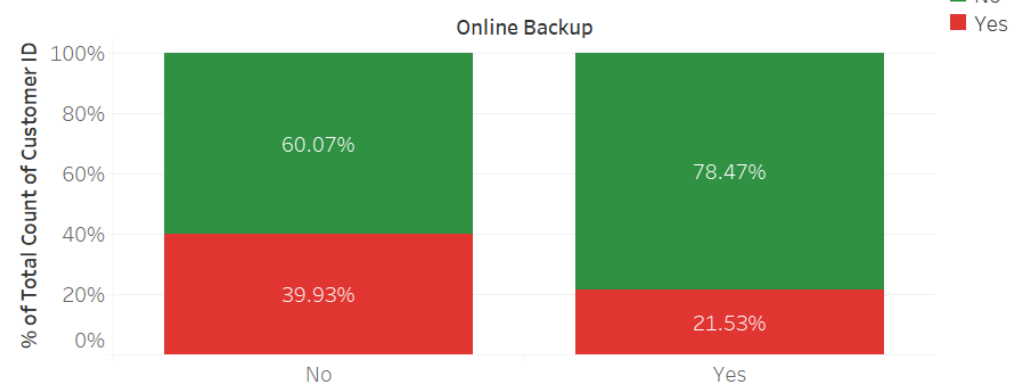
### Contracts



### Internet service



### Online Backup Churn



### Online Security Churn

