



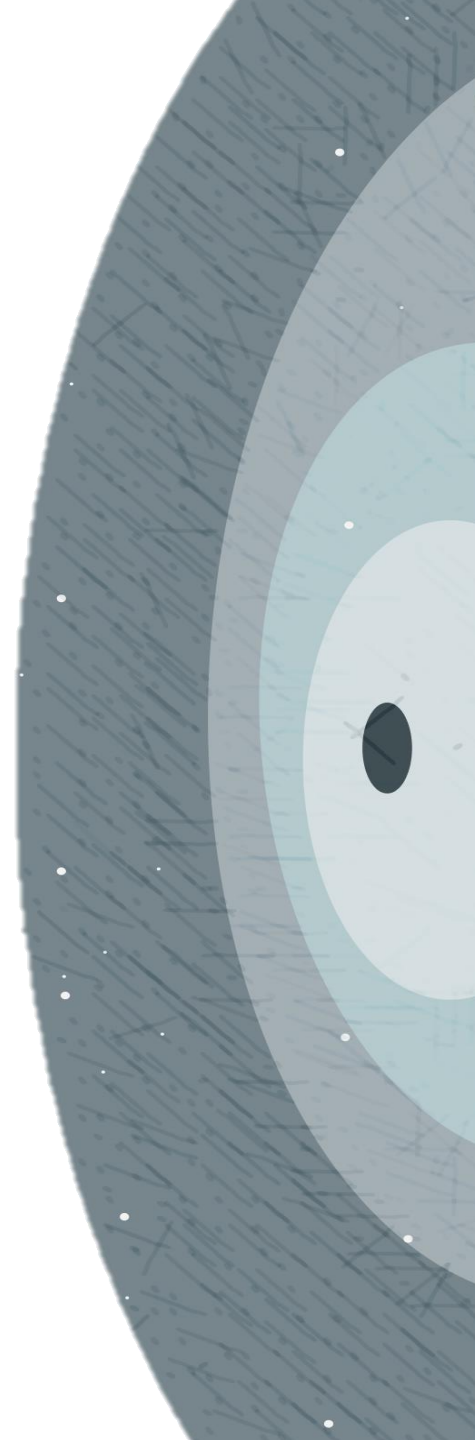
PHONENOW
CUSTOMER CHURN
ANALYSIS



DATASET DESCRIPTION

The dataset stores customer's information of PHONENOW, a telecom company. The dataset contains 7043 records, corresponding to 7043 customers, each customer has 21 features (total of 21 fields/columns in the table) and they can be divided into 3 groups:

- General information
- Service used
- Contract type



PROBLEM DESCRIPTION

- **Churn customer** is a customer or a subscriber who chooses to stop the product or the service of a company.
- Customers in the telecom industry are offered with a variety of choices among many different providers, and they can also easily switch from one provider to another.
- In the competitive market of the telecom industry, the annual customer churn rate is between 15% and 20%.
- The **customer churn rate** is an important measure, because the cost of retaining a customer is definitely lower than the cost of getting a new customer.



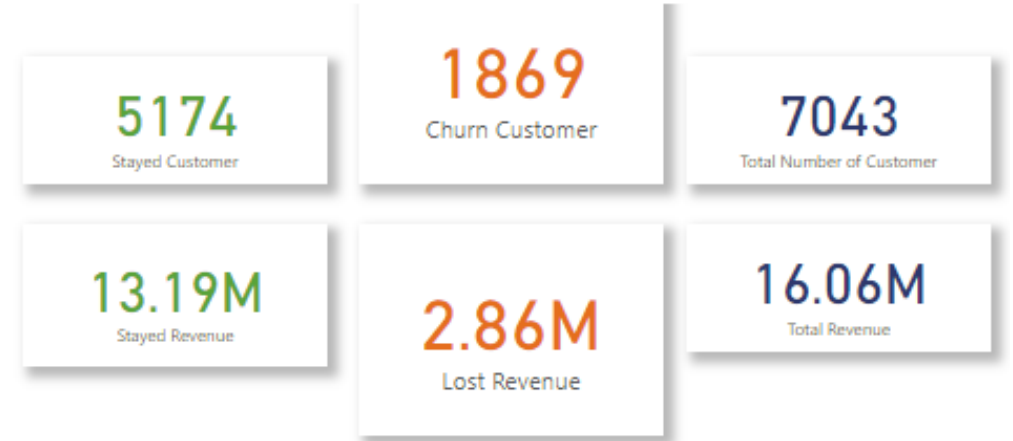
REPORT GOAL

- Analyzing data to create PHONENOW's churn customer persona
- Determining the factors affecting the customer churn rate of PHONENOW
- Giving valuable recommendations based on findings and insights

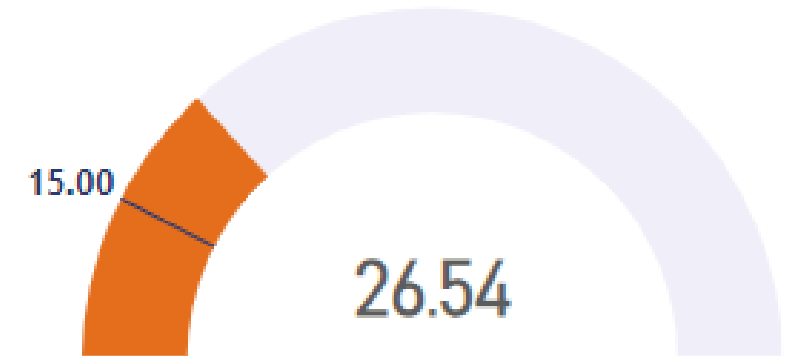


OVERVIEW

- The total number of customers at PHONENOW currently is 7043, and they generate the revenue of 16.06 million US dollars for the company.
- The total number of churn customer is 1869. The customer churn rate is 26.54%, which is pretty much higher than the annual churn rate of the telecom industry (15%). PHONENOW should come up with new strategies to retain the churn customers or the company will lost 2.86 million US dollars.



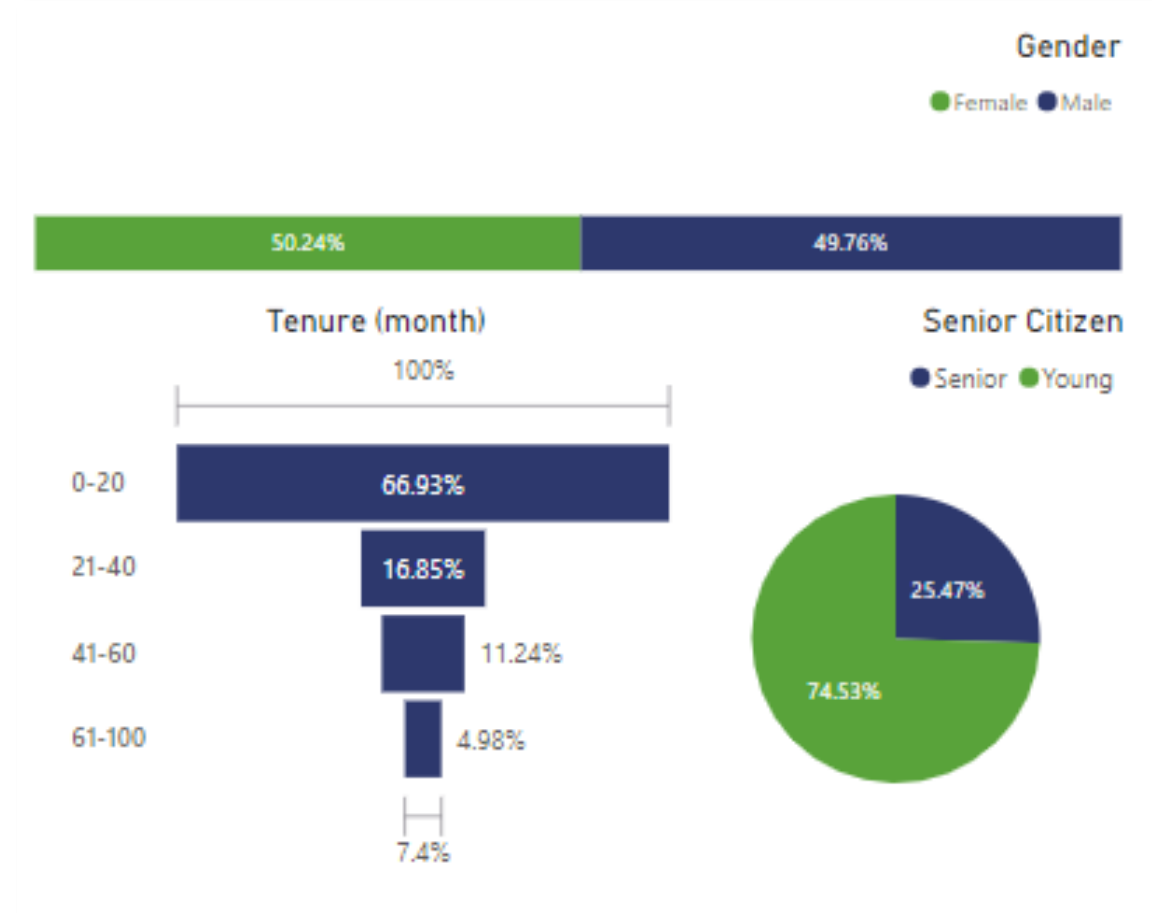
Churn Rate (%)



CHURN PROFILE

Demographics:

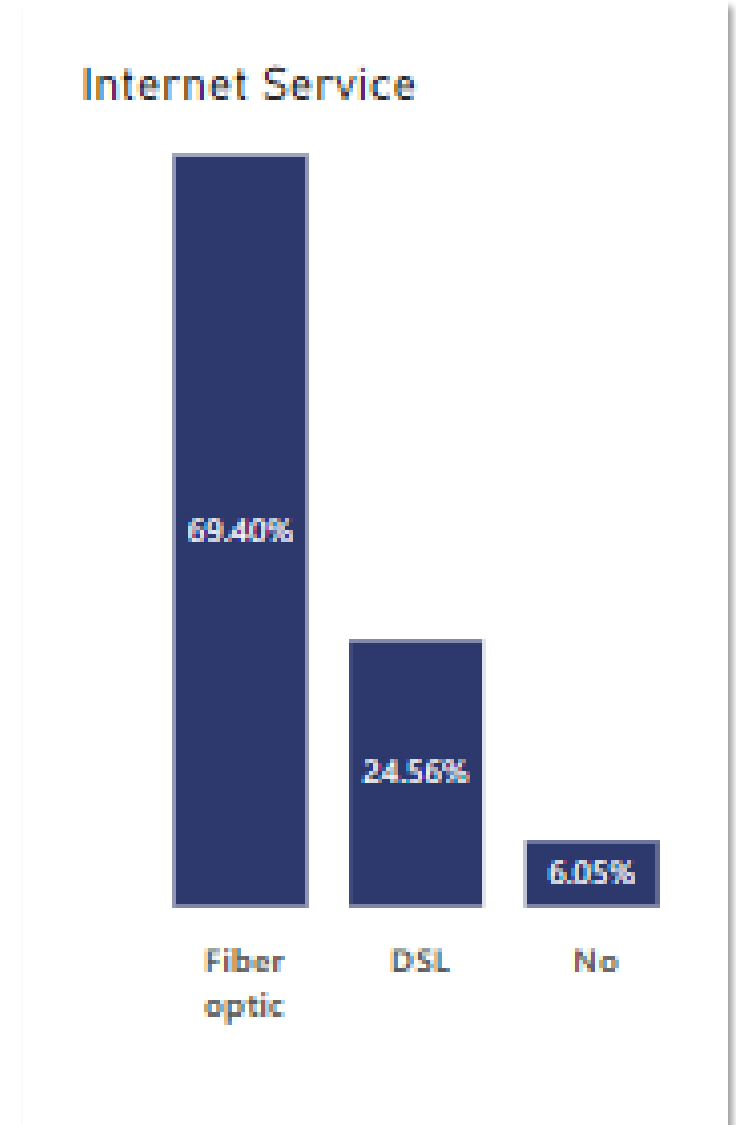
- **Gender:** the difference between female and male is insignificant, and it is similar to the general profile of PHONENOW customers.
⇒ Gender does not affect the churn rate of a customer.
- **Age:** 74.53% of the churners is young people. However, about 84% of PHONENOW's customers is young people, so it should be noticed that the percentage of senior customer that churned (25.5%) is higher than the senior customer of the company (16.2%).
⇒ Senior customers have higher chance to churn.
- **Tenure:** churners are mostly customers having less than 20 months of using PHONENOW service.



CHURN PROFILE

Service used:

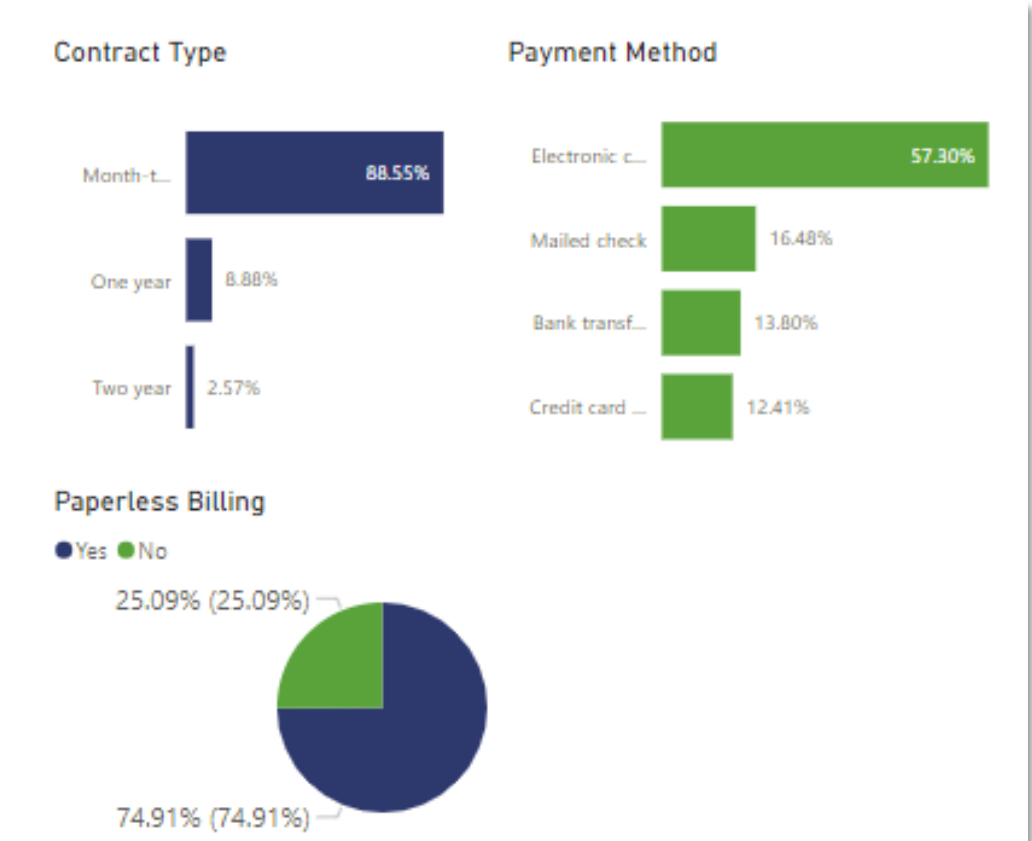
- Two main services that PHONENOW is offering is phone service and internet service.
- The percentage of churned customers who use phone service and that of general customers of PHONENOW is almost the same (about 90%), so this factor is insignificant to the customer churn rate.
- There is 69.40% churners using Fiber Optic for Internet service. This is a high rate so this factor should be considered when analyzing the churn rate.



CHURN PROFILE

Contract type:

- It can be seen that the number of churners choosing month-to-month contract and electronic check for payment method outnumbers other options (88.55% and 57.30% respectively) and have higher percentage to the grand total than in the general customer profile.
- ⇒ The contract type and payment method are significant to the customer churn rate.

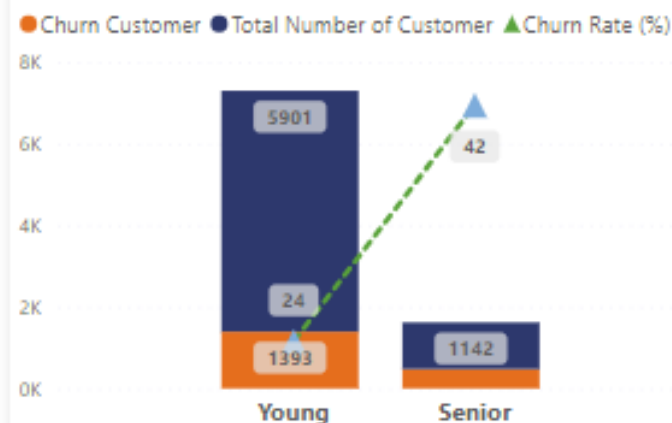


CHURN ANALYSIS

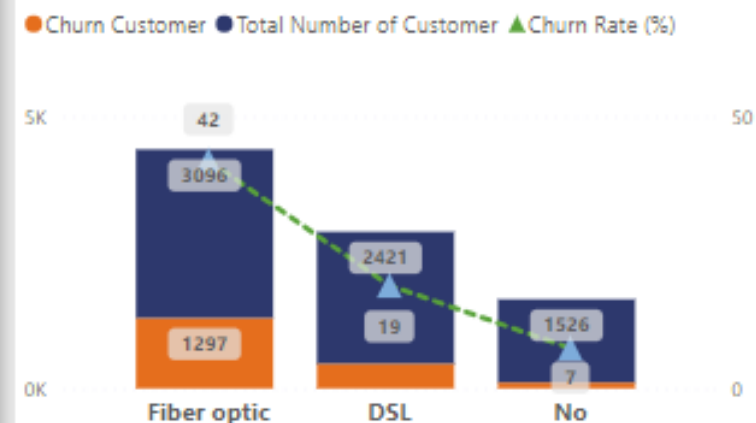
The set of charts are the number of churning by significant factors to the churn rate: Age, Internet Service, Contract type, and Payment Method.

- ⇒ Senior customers have **42%** to churn.
- ⇒ Customers who choose Fiber Optic for internet service have **42%** to churn.
- ⇒ Customers who sign month-to-month contract have **43%** to churn.
- ⇒ Customer who use electronic check have **45%** to churn.

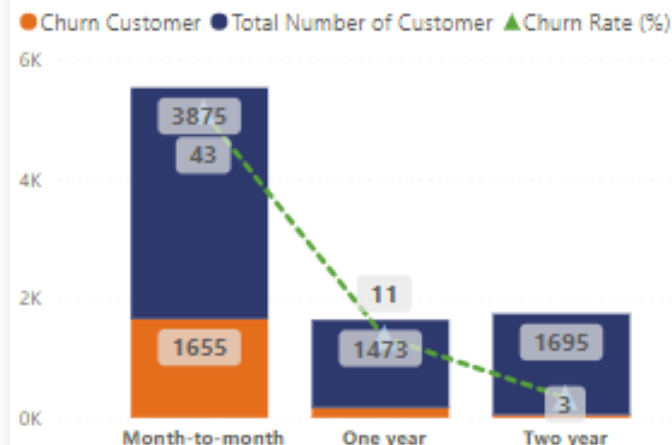
Number of churning by Age



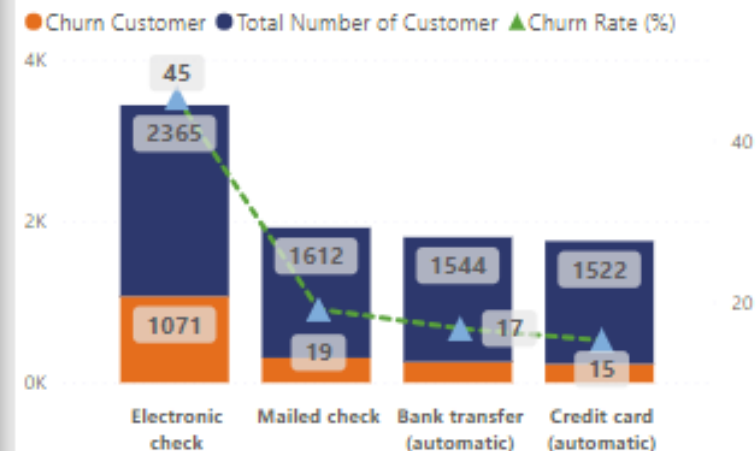
Number of churning by Internet Service



Number of churning by Contract Type



Number of churning by Payment Method



FINDINGS AND RECOMMENDATIONS

- The annual customer churn rate for telecom industry is 15 - 20%. The current customer churn rate at PHONENOW is 26.54%, which is over the acceptable level of the industry.
 - ⇒ PHONENOW should focus on retaining the current customer to reduce the churn rate, rather than focus on finding new customer at this stage.
- 42% of senior customer churned within last month. This high rate indicates that age is an important factor affecting the customer churn rate at PHONENOW.
 - ⇒ PHONENOW should reconsider the service, product, and policy for the senior segmentation, making them more attractive and useful for the senior.
- 43% of customer signing Month-to-month contract churned within last month. This high rate indicates that contract type is an important factor affecting the customer churn rate at PHONENOW.
 - ⇒ Customer with Month-to-month contract are the least bonding to the company's service and they can easily leave after the contract ends. Customer service should focus on taking care of these customers and more attractive promotion can be given out to these customer in order to secure them and turn them into longer contract type.

FINDINGS AND RECOMMENDATIONS

- 42% of customer choosing Fiber Optic for Internet Service churned within last month. This high rate indicates that Internet Service Type is an important factor affecting the customer churn rate at PHONENOW.

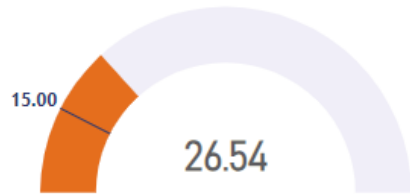
- ⇒ Some problems may be happening affecting the experience of Fiber Optic users. PHONENOW should explore and investigate further on the reasons to improve the quality of this service. This is important because it seems like Fiber Optic is one of the main products of PHONENOW because of the large user number in comparison with other kinds of product.

- 45% of customer choosing Electronic Check as Payment Method churned within last month. This high rate indicates that Payment Method is an important factor affecting the customer churn rate at PHONENOW.

- ⇒ PHONENOW should investigate further on the user experience during Electronic Check process to see if there is any inconvenience for the customer. It could be about privacy, speed, user friendliness,... This is also important to improve because there will be more and more customer choosing this payment method due to the fast pace development of technology.

DYNAMIC OVERVIEW

Churn Rate (%)



5174

Stayed Customer

1869

Churn Customer

7043

Total Number of Customer

13.19M

Stayed Revenue

2.86M

Lost Revenue

16.06M

Total Revenue

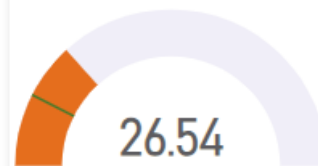
7043

Total Number of Customer

1869

Churn Customer

Churn Rate (%)

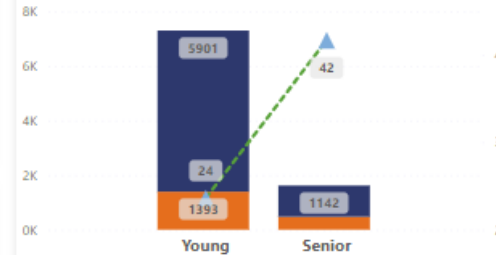


DASHBOARD

CUSTOMER CHURN ANALYSIS

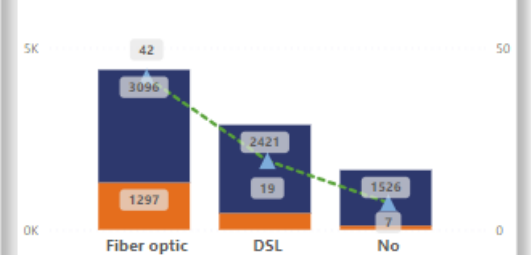
Number of churner by Age

● Churn Customer ● Total Number of Customer ▲ Churn Rate (%)



Number of churner by Internet Service

● Churn Customer ● Total Number of Customer ▲ Churn Rate (%)



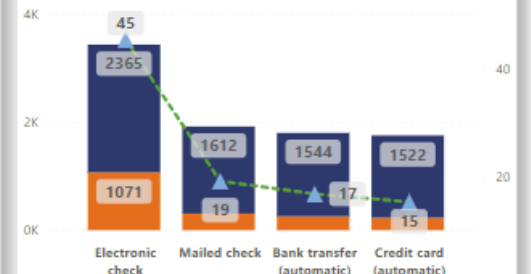
Number of churner by Contract Type

● Churn Customer ● Total Number of Customer ▲ Churn Rate (%)



Number of churner by Payment Method

● Churn Customer ● Total Number of Customer ▲ Churn Rate (%)



DASHBOARD

CUSTOMER PROFILE

GENERAL CHURN

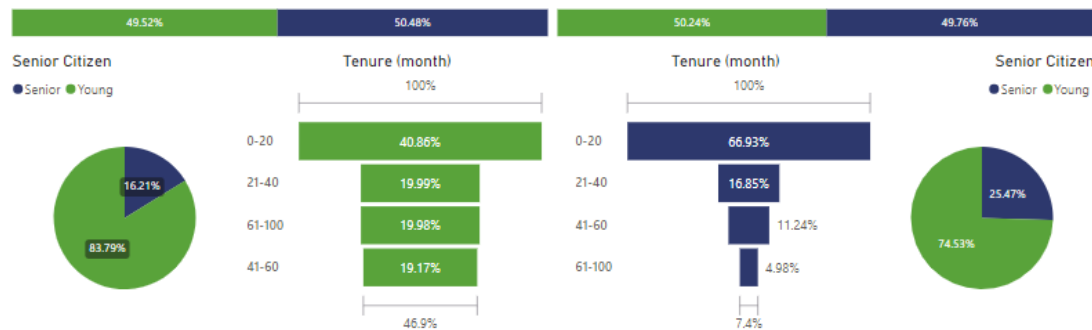
DEMOGRAPHICS

SERVICE USED

CONTRACT

Gender

Female Male



CUSTOMER PROFILE

GENERAL CHURN

DEMOGRAPHICS

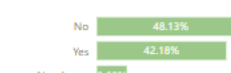
SERVICE USED

CONTRACT

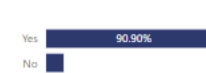
Phone Service



Multiple Lines



Internet Service



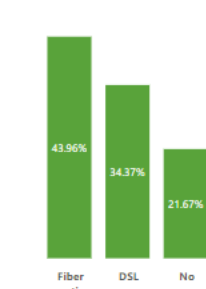
OnlBackup



TechSupport



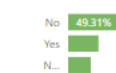
Internet Service



OnlBackup



TechSupport



OnlSecurity



StreamMovies



DeviceProtection



StreamTV



CUSTOMER PROFILE

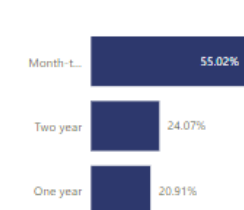
GENERAL CHURN

DEMOGRAPHICS

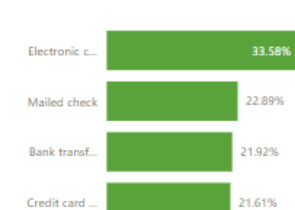
SERVICE USED

CONTRACT

Contract Type

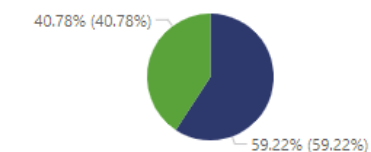


Payment Method

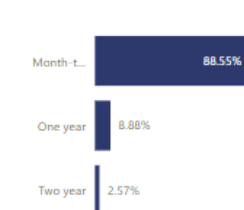


Paperless Billing

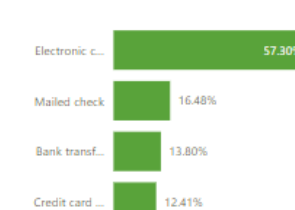
Yes No



Contract Type

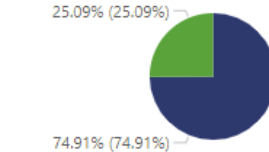


Payment Method



Paperless Billing

Yes No





THANK YOU
for your attention