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**PROJECT ON**  
**TELECOM CUSTOMER CHURN**  
**ANALYSIS**

-- PRESENTED BY  
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# Color Theory

- Pink color represent the Female ratio
- Blue color represent the Male ratio
- Forest color represent the Graphs
- Orange color represent the Line Graphs
- Red color represent the Highest values
- White color represent the Data Lables of Graph

# Business Objective

- To identify churn patterns based on gender, senior citizens, and contract type.
- To analyze how churn is related to monthly charges, tenure, and internet service.
- To compare churn behavior across different services and payment methods.
- To measure churn rate and its effect on company revenue.
- And finally, to give insights and recommendations to reduce churn.

# Approach to prove the business insights

- Imported the Telecom Customer Churn dataset into Power BI.
- Cleaned the data — removed duplicates and handled missing values.
- Changed data types, like converting SeniorCitizen from 0/1 to Yes/No.
- Created new columns such as Tenure (in months) and Number of Services.
- Then, I built different visuals in Power BI to find patterns and insights.

# Data Preparation

## Dataset used :

Telecom Customer churn data (7,043 records, 24 columns)

## Steps Taken :

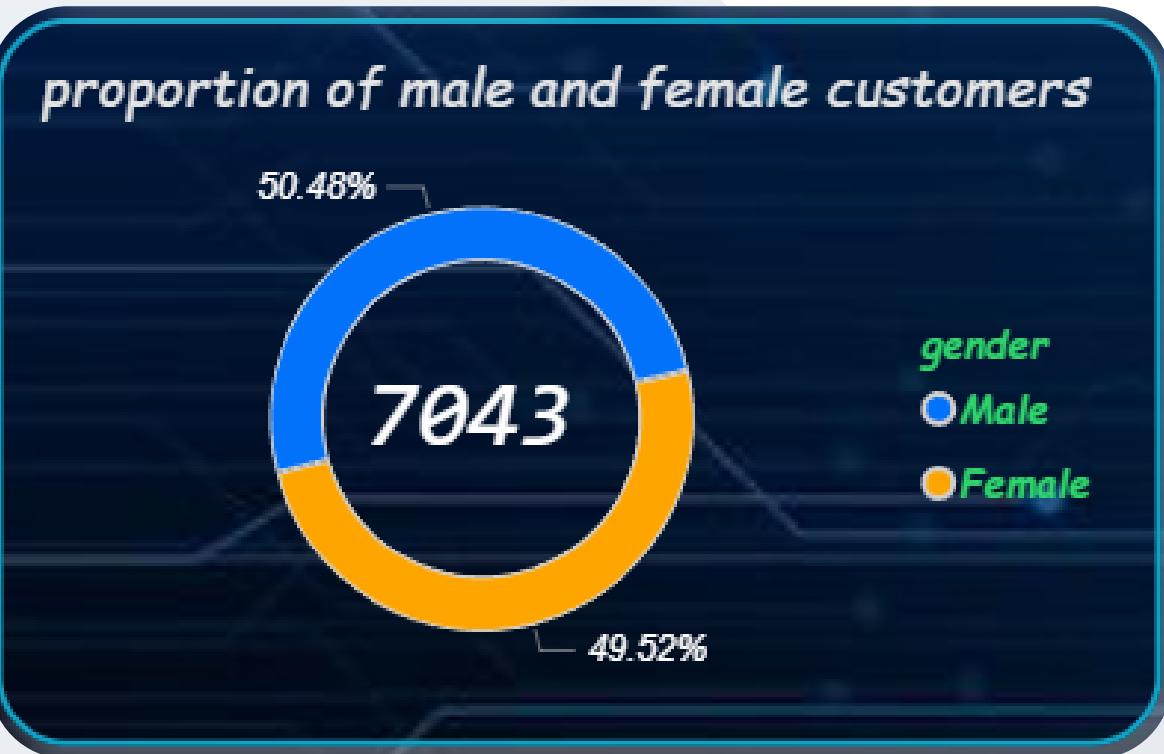
1. Imported the dataset into Power BI.
2. Removed duplicates and handled missing values (mainly in TotalCharges).
3. Converted data types – e.g., SeniorCitizen (0/1 → Yes/No).
4. Created new columns like:

Tenure (in months )

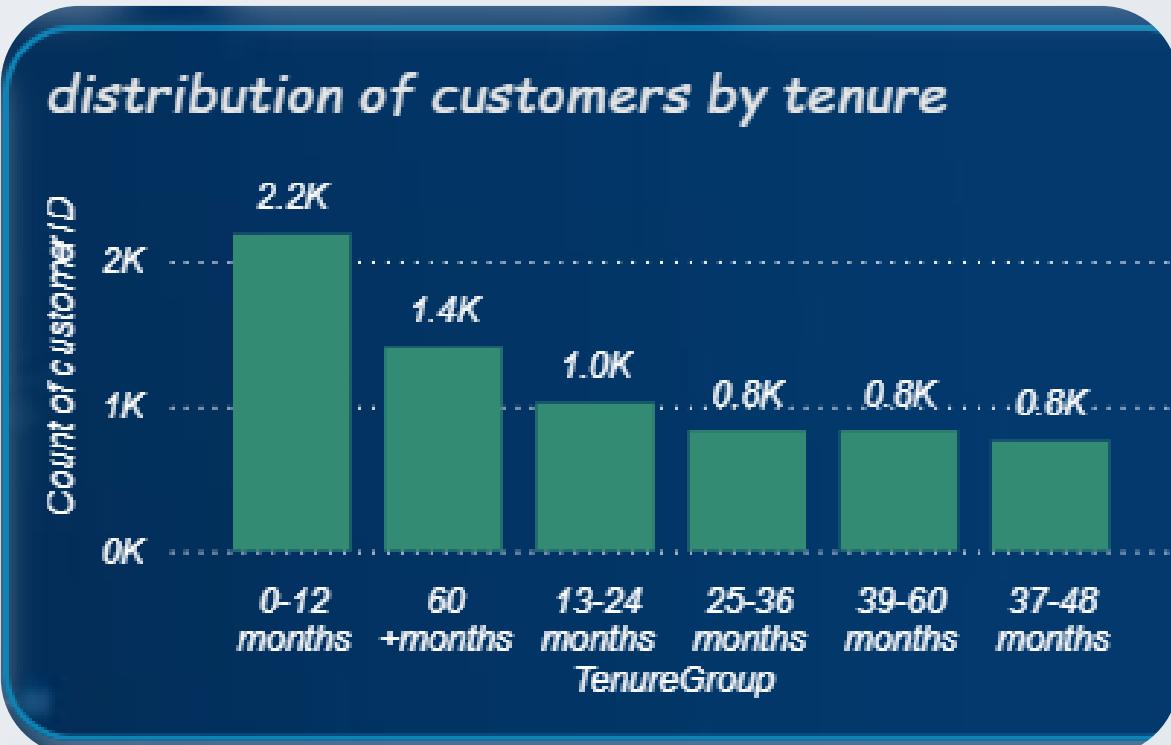
Number of Services

% of Partners, Dependents, Senior Citizens.

# Key Visuals

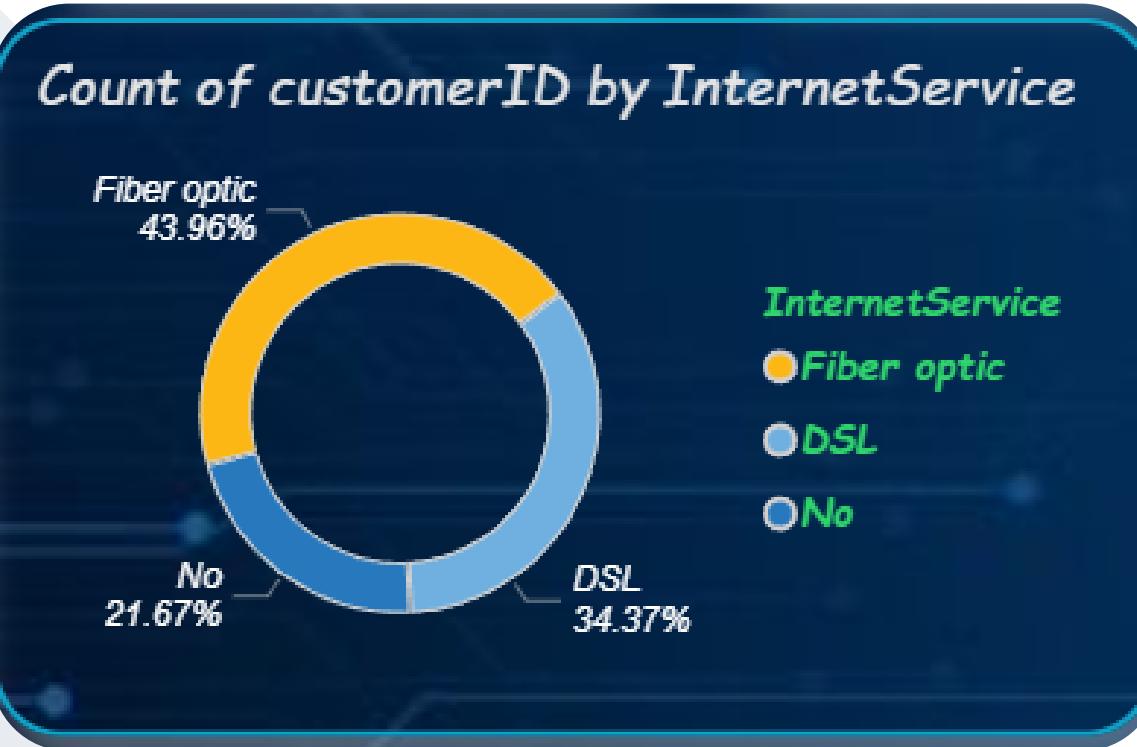


- The chart shows an almost equal split — **50.48% male** and **49.52% female**.
- Gender has minimal influence on customer churn.
- Both genders experience similar service quality and issues.

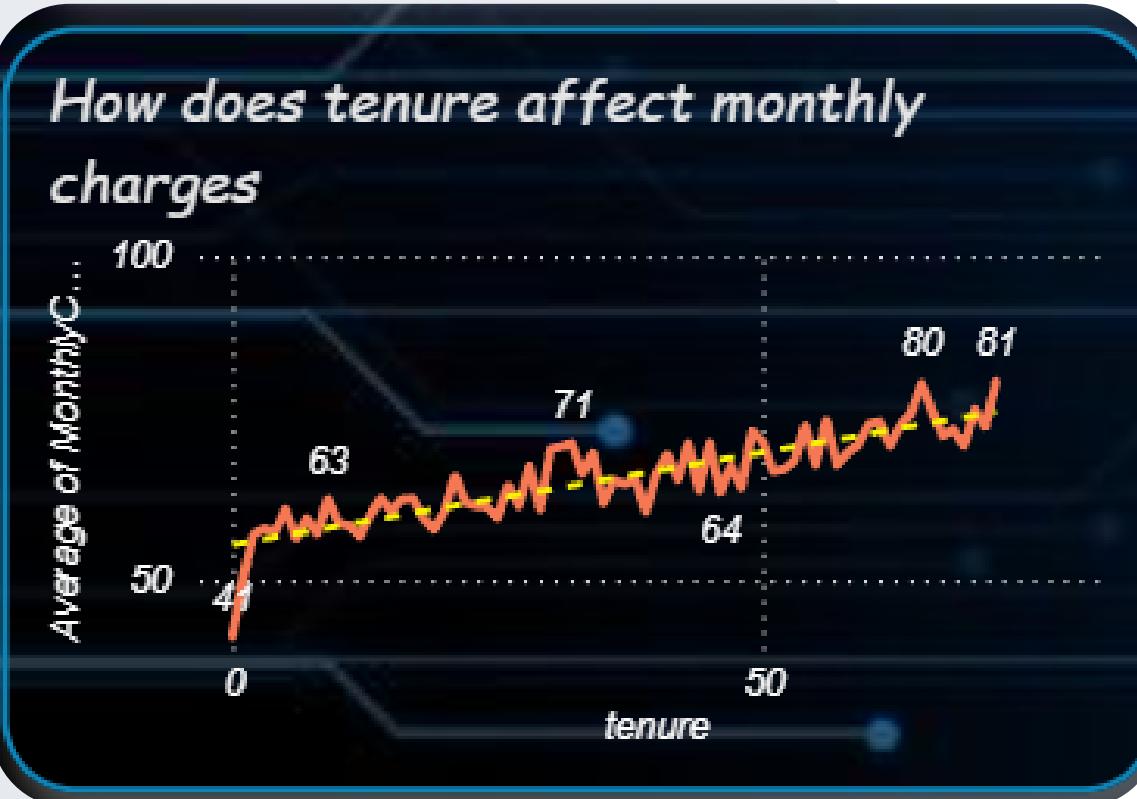


- Most customers have been with the company for **less than a year**.
- A smaller group has stayed for more than **60 months**.
- This shows many new customers join, but fewer remain long-term.

# Key Visuals

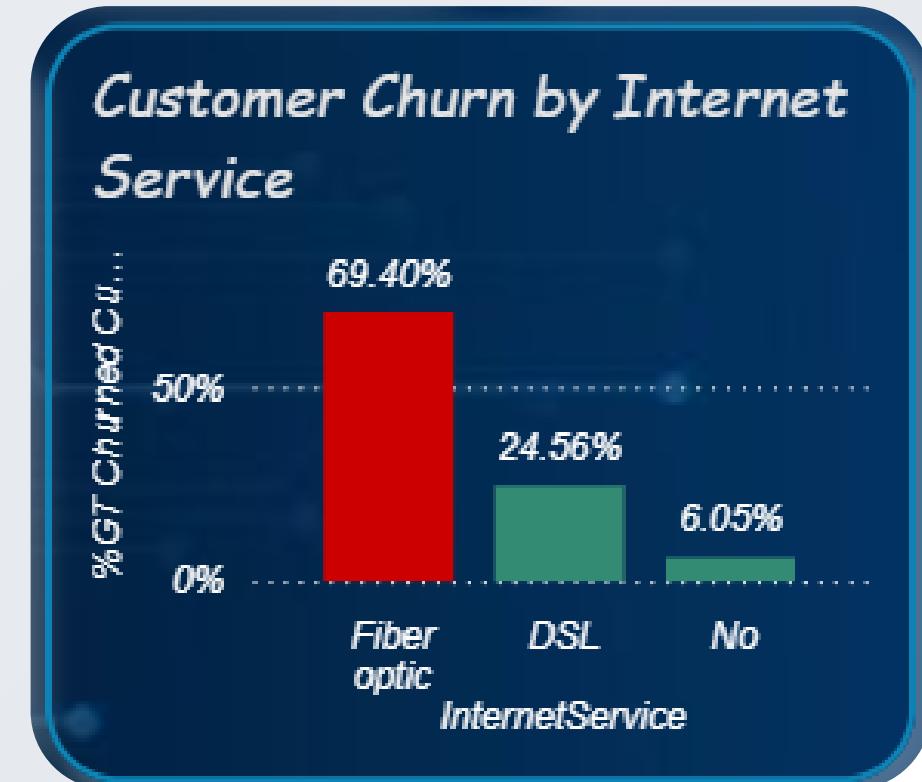
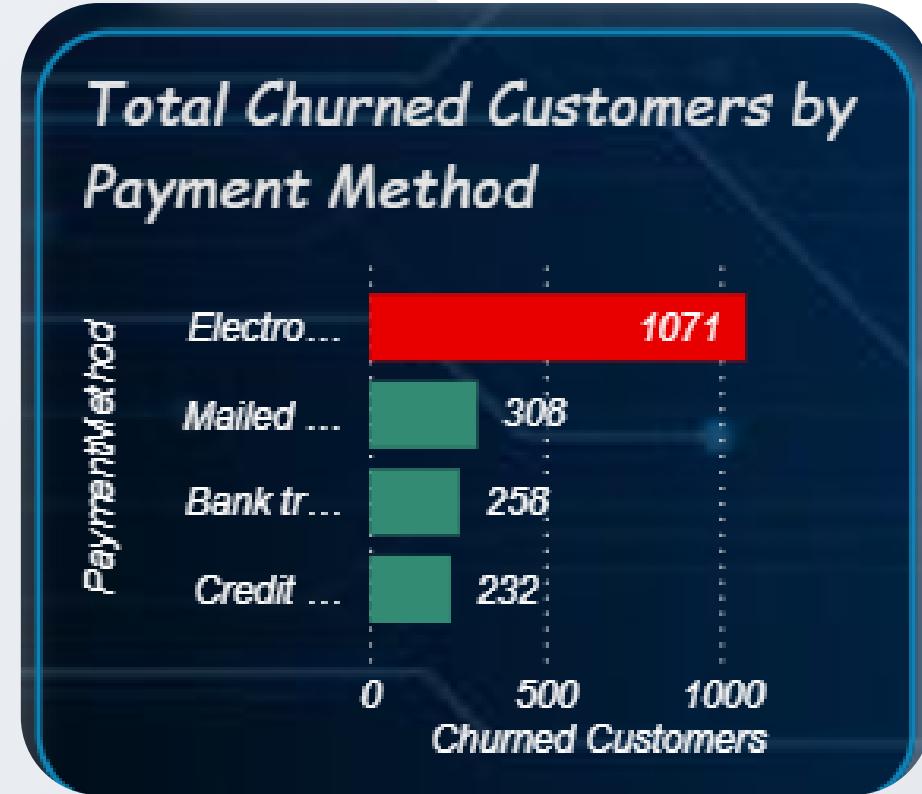


- Most customers use fiber optic internet (**43.96%**).
- DSL service is used by **34.37%** of customers.
- Around **21.67%** of customers do not have internet service.



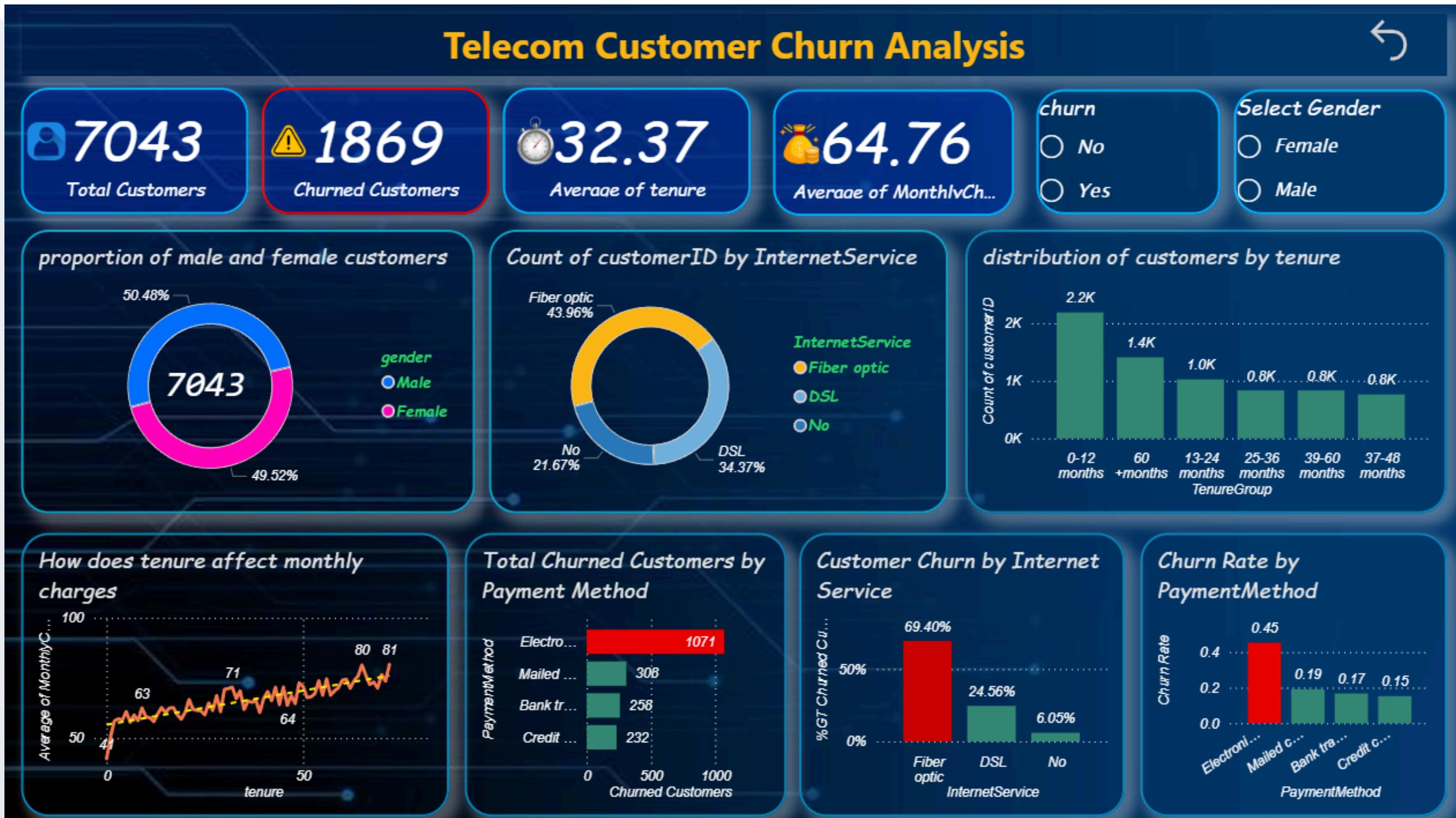
- The chart shows that monthly charges **increase** as customer tenure grows.
- New customers start with **lower** charges, while long-term users pay **higher** amounts.
- This suggests experienced customers use more services over time.

# Key Visuals



- Most churned customers used the **electronic check payment** method (1071).
- Fewer customers churned with mailed check, bank transfer, or **credit card** methods.
- This suggests electronic check users may face more payment-related issues.
  
- Fiber optic users have the highest churn rate at **69.40%**.
- DSL users show a moderate churn rate of **24.56%**.
- Customers without internet service have the lowest churn at **6.05%**.

# Dashboards



# Link To See Dashboards

[Click Here](#)



# Conclusion

The Customer Churn Analysis highlights that customer retention remains a major challenge for the telecom company. The data shows higher churn among customers with **month-to-month contracts, high monthly charges**, and those using fiber optic internet services.

## Insights:

- Customers with **short-term contracts** are more likely to leave.
- **Fiber optic users** show the highest churn rate compared to **DSL and non-internet users**.
- **Electronic check payment** users have a greater chance of churning.

## Recommendations:

- Encourage **long-term contracts** with discounts or **loyalty rewards**.
- Improve **fiber optic service quality** and customer support.
- Focus on customer **satisfaction to increase retention** and **brand trust**.

----- Thank you -----

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