

# Customer Churn Analysis Summary

This analysis explores why some customers are leaving (churning) and what patterns exist in their behavior.

## 1. Data Cleanup:

- The TotalCharges column was stored as a string. Blank values were replaced with 0 and then converted to float.
- The SeniorCitizen column was made more readable by converting 0/1 to "No"/"Yes".

## 2. Overall Churn Rate:

- About **26.55%** of customers have churned (left the company).

## 3. Churn by Gender:

- There is **no major difference** in churn between male and female customers. Gender does not significantly affect churn.

## 4. Churn by Age Group (Senior Citizens):

- Around **41.7%** of senior citizens have churned, compared to a much lower percentage for non-senior customers.
- This shows that older customers are more likely to leave.

## 5. Tenure (How Long a Customer Stayed):

- Customers who have been using the service for **only 1–2 months** are more likely to churn.
- Those with **long-term usage** (many months or years) tend to stay loyal.

## 6. Monthly Charges:

- Customers with **monthly charges above \$70** are more likely to leave.
- Higher charges may lead to dissatisfaction.

## 7. Contract Type:

- People on **monthly contracts** are churning the most.

- Customers with **1-year or 2-year contracts** are more likely to stay, showing that long-term contracts reduce churn.

#### 8. **Payment Method:**

- Customers paying through **electronic checks** churn more than those using credit cards or bank transfers.
- This might be linked to the kind of customers using that method.

#### 9. **Support and Security Services:**

- Customers who **do not use Tech Support, Online Security, or Backup services** are more likely to churn.
- These additional services might make customers feel more supported and secure, encouraging them to stay.