Summary- Teco Customer Churn Analysis

This project analyzes customer churn data from a telecom company to identify key factors influencing whether customers stay or leave. Using visualizations and percentage-based insights, the analysis highlights patterns in service usage, contract types, and demographics that directly impact churn.

Key Findings

- **Churn Rate**: Around **26–27% of customers churned**, highlighting a major retention challenge.

- **Internet Service**:

  - Customers with **Fiber Optic** connections show the **highest churn (42%)** compared to **DSL (18%)**.

  - Indicates dissatisfaction with fiber optic service or pricing.

- **Value-Added Services** (OnlineSecurity, TechSupport, DeviceProtection, OnlineBackup):

  - Customers **without these services churn at nearly 40%**, compared to only **15–20%** among subscribers.

  - Suggests that offering bundled security/tech support reduces churn significantly.

- **Contract Type & Tenure**:

  - **Month-to-month customers churn at 45%**, whereas those with **1- or 2-year contracts churn <12%**.

  - Long-term contracts strongly improve retention.

  - Newer customers (tenure < 12 months) are much more likely to leave.

- **Demographics**:

  - **Senior citizens churn at 41%**, higher than younger customers (~25%).

  - Indicates the need for age-specific customer support strategies.

- **Streaming Services (TV/Movies)**:

  - Minimal impact on churn. Users of streaming services churn at ~28%, similar to those without.

Conclusion

The analysis shows that churn is driven less by entertainment services and more by **contract type, internet service quality, and lack of protective add-ons (security, support, backup)**. To reduce churn, the company should:

1. **Promote long-term contracts** with discounts.

2. **Bundle OnlineSecurity, TechSupport, and Backup services**.

3. **Investigate Fiber Optic dissatisfaction** to improve quality or pricing.

4. **Target retention offers for senior citizens and new customers**.

Visual Insights

The project includes clear visualizations:

- **Count plots** for service usage vs. churn.

- **Pie/Bar charts** highlighting churn percentages.

- **Subplots** comparing multiple service categories side by side.