**Churn Analysis Report for a TeleCom**

**Introduction**

Customer Churn is a critical challenge for businesses as it directly impacts a company’s financial health, operational efficiency, brand reputation and ability to compete and thrive in the market. This report contains a comprehensive churn Analysis for a Telecommunication project to understand customer attrition patterns and identify strategies for retention and overall health and longevity of the business.

**Data**

The Telco Customer churn dataset contains information about customer demographics, services subscribed, contract details and churn status. Our objective is to use pivot tables and charts to analyse data and gain insights.

**Methodology**

To achieve our aims, we take the following steps:

* **Data Pre-processing**: Churn analysis is built on snapshots which show active customers and their attributes in the beginning of the period.
* **Exploratory data analysis**: We began by performing exploratory data analysis to understand the characteristics of the dataset. We examined the distribution of customer churn and found that **approximately 26.5%** of customers in the dataset churned, indicating a significant challenge for the Telco company. We also observed that 75% of customers have a tenure of **fewer than 55 months,** average monthly charges are **$64.76** whereas 25% of customers pay more than **$89.85 per month.** Also, customers with shorter contract tenure churned more than those with longer tenure. The same way customers on monthly charges payment plan churn more than those with yearly payment plan.
* **Insights Generation:** Insights were generated based on our analysis and visualizations.
* **Visualization and reporting:** Informative charts and visualizations were used to present our findings in this project.

**Churn Metrics**

Churn rate stands at 26.5% while retention rate is 73.5% emphasizing the need to focus on improving customer loyalty.

**Key Questions covered in this project**

* What is the churn rate?
* Which Customer segment has the highest churn?
* What are the key demographic factors influencing churn?
* What is the relationship between monthly charge and tenure?
* Are there patterns in Tenure and churn?

**Analysis and Insights**

**What is the Churn Rate?**

The churn rate is **26.5%**

**Which Customer Segment has the highest Churn?**

There are two types of citizens considered in this data, from the chart above, we see that the churn rate for senior citizens was higher compared to the churn rate for not senior citizens.

Segmenting by Contract Type, payment method and Monthly Charges highlights that citizens with month-to-month contracts and monthly charges of above $68 are most prone to churn. Tailoring retention strategies for these segments is crucial.

**Demographic Factors influencing Churn**

Users with no dependents are more likely to churn than users with dependents. This insight is valuable as it can guide targeted marketing efforts to focus more users on dependents and tailor retention strategies for users with no dependents.

**Patterns in tenure and Churn**

From the chart above, it can be seen that users with longer tenure are likely to churn lesser than users with shorter tenure.

**Recommendations**

* Introduce loyalty programs for long term contract subscribers
* Implement targeted discounts for high value customers

**Conclusion**

Addressing Churn is vital for Telecommunication Companies sustained growth. Strategic implementation of recommendations is poised to mitigate churn, bolstering customer retention and profitability.