**Telco Customer Churn Analytical Report**

Introduction:

The objective of this project is to analyse customer churn in a Telco company using Tableau visualization techniques.

The analysis involved exploring the relationship between churn and different factors such as customer demographics, service usage, contract types, payment methods, and total charges.

Various visualizations were created using Tableau to analyse churn behaviour and identify trends and patterns in the data.

Key Factors:

**Churn Rate**: The average churn rate in the dataset was calculated to be 1%. This indicates the average percentage of customers who churned during the observed period. The highest churn rate is 9% in first tenure. The initial churn rate is higher among new customers and the highest tenures, gradually decreasing as tenure is in between. This pattern suggests that customers are more likely to churn shortly after subscribing to the service, potentially due to dissatisfaction or issues encountered during the early stages of their subscription. I used Line graph for this analysis.

**Demographic Analysis**: Churn is distributed across genders and includes both senior citizens and non-senior citizens. This indicates that churn is not significantly influenced by demographic factors such as gender or age group, highlighting the importance of other factors in predicting churn. I used stacked bar graph.

**Service Usage Analysis:** Fiber optic users have a significantly higher churn rate (44%) compared to DSL users (10%). This suggests that customers using fiber optic services are more likely to churn, potentially due to dissatisfaction with the service quality or pricing. I used packed bubble graph for this analysis

**Payment Method Analysis:** Customers who use electronic check as their payment method are more likely to churn. This indicates that there may be issues or challenges associated with the electronic check payment process, leading to a higher churn rate among customers using this payment method. For this analysis I used stacked bars.

**Total Charges Analysis:** Customers with lower total charges tend to churn more frequently. This finding suggests that customers who spend less on services may be more price-sensitive or less engaged, leading to a higher likelihood of churn. I used histogram for analysing this data.

**Contract Analysis**: Churn behaviour was analysed based on contract types (month-to-month, one year, two years). Differences in churn rates and tenure for customers with different contract types were observed. I used area chart for this analysis.

Conclusion:

There are 7043 customers and the percentage of both male and female are equal. Our analysis shows that a significant portion of customers opt for month-to-month contracts, with 1655 customers not renewing their contracts in this category. Comparatively, the churn rates for one-year and two-year contracts are lower, with 166 and 48 customers respectively for not renewing. Whereas, a substantial number of customers choose to renew their contracts in all categories, with 2220 renewals for month-to-month contracts, 1307 for one-year contracts, and 1647 for two-year contracts.

To effectively reduce churn rates, the company should prioritize several key strategies. First and foremost, enhancing the quality and reliability of fiber optic services is crucial, as indicated by the higher churn rate among users of this service. By ensuring a seamless and dependable experience, the company can increase customer satisfaction and loyalty.

Additionally, offering incentives for long-term contracts can encourage customers to commit to the service for extended periods, thereby reducing the likelihood of churn. Offering discounts, special promotions, or added benefits for customers who opt for one-year or two-year contracts can incentivize them to stay with the company for longer durations.