**Customer Churn Analysis: Summary of Findings**

**Introduction**

This document summarizes the findings of the exploratory data analysis (EDA) conducted on customer churn data. The analysis focused on identifying key factors influencing churn, including demographic, financial, and behavioral attributes, as well as multi-factor insights. Below are the detailed findings and recommendations.

**1. Demographic Insights**

* Senior Citizens are significantly more likely to churn compared to non-seniors. This suggests the need for targeted retention strategies, such as tailored offers or improved support.
* Customers without dependents also exhibit higher churn rates, indicating a potential lack of engagement or reliance on services.

**2. Behavioral Factors**

* Month-to-Month Contracts have the highest churn rates, as these customers face minimal barriers to switching providers. Conversely, customers with one-year or two-year contracts show significantly lower churn rates.
* Lack of OnlineSecurity and TechSupport correlates strongly with higher churn, highlighting these services as potential retention levers.
* Customers paying via Electronic Checks have the highest churn rates, likely due to convenience or satisfaction issues.

**3. Financial Metrics**

* Churned customers generally have higher MonthlyCharges, indicating potential price sensitivity.
* Retained customers tend to have higher TotalCharges, as they are more likely to stay longer and utilize additional services.

**4. Multi-Factor Analysis**

* Customers on month-to-month contracts with high MonthlyCharges and low tenure are at the highest risk of churn.
* Tenure segments reveal that customers in their first year (0–12 months) exhibit the highest churn rates, emphasizing the importance of early engagement strategies.
* Combining add-on services with contract type shows that customers lacking critical services like OnlineSecurity are more likely to churn, especially those on flexible contracts.

**5. Recommendations**

* Focus retention efforts on senior citizens and customers without dependents by offering tailored promotions or improved service experiences.
* Encourage long-term contracts through incentives for month-to-month customers, such as discounts for upgrading to one-year or two-year plans.
* Highlight the value of add-on services like OnlineSecurity and TechSupport to increase engagement and reduce churn.
* Address concerns around pricing for high MonthlyCharges customers by offering personalized discounts or bundling options.
* Improve the digital billing experience for customers using electronic checks to reduce dissatisfaction.

**Conclusion**

The analysis provides actionable insights into the factors driving customer churn. By focusing on at-risk segments and addressing key drivers of churn, the company can enhance customer retention and improve overall satisfaction.