**Executive Summary – Telecom Churn Analysis**

This analysis investigates the factors influencing customer churn in a telecom company and provides insights into customer behaviour patterns to help improve retention.

**🔍 Key Findings**

1. **Overall Churn Rate**
   * Approximately **26.54% of customers have churned**, meaning over a quarter of the customer base has left the service.
2. **Senior Citizen Impact**
   * A **higher percentage of senior citizens** are observed to churn compared to younger customers.
   * Indicates possible dissatisfaction among older customers, possibly due to service complexity or cost sensitivity.
3. **Tenure and Loyalty**
   * **Customers with longer tenure** tend to stay.
   * Newer customers are more likely to churn, suggesting the need for better onboarding or early engagement programs.
4. **Contract Type Effect**
   * **Month-to-month contract customers** have the highest churn rate.
   * **1-year and 2-year contract holders** are significantly more loyal.
   * Incentivizing customers to shift to longer-term contracts could reduce churn.
5. **Service Usage Patterns**
   * Customers who **use additional services** such as:
     + **PhoneService**
     + **InternetService (especially DSL)**
     + **OnlineSecurity**
     + **TechSupport**
   * …are **less likely to churn**.
   * Lack of these value-added services is associated with higher churn.
6. **Payment Method Influence**
   * Customers who pay via **Electronic Check** show a **higher likelihood of churn**.
   * This could indicate a negative experience with billing or payment reliability.

**💡 Strategic Recommendations**

1. **Customer Retention Programs**
   * Target **senior citizens** and **new customers** with personalized offers and support.
   * Promote **long-term contract plans** through discounts or loyalty benefits.
2. **Service Improvement**
   * Improve satisfaction for **Electronic Check** users — possibly by promoting auto-pay or card-based payments.
   * Encourage usage of **security, backup, and tech support** services.
3. **Predictive Analytics**
   * Build a **churn prediction model** to proactively identify at-risk customers.
   * Use insights from tenure, contract, and service usage to take preventive action.

**📈 Conclusion**

The analysis clearly shows that churn is influenced by **contract duration, customer age, service adoption, and payment method**.  
Focusing on **long-term engagement, service enrichment, and better payment experiences** can significantly improve retention and reduce churn rates.