SUMMARY AND KEY INSIGHTS

This report provides insights into the drivers of **customer churn** in a telecom dataset. The analysis covers demographics, tenure, contract type, services, and payment methods.

Overall Churn Rate

- Out of ~7,000 customers, around 26.5% have churned while 73.5% remain active.
- This reflects a **1** in **4** customers loss risk, highlighting the importance of customer retention.

Demographics

- Gender:
 - Male churn: ~26%.
 - Female churn: ~27%.
 - Gender has negligible impact on churn.

• Senior Citizens:

- Senior customers make up ~16% of the base.
- Of them, ~41% have churned, compared to ~24% of non-senior citizens.

Customer Tenure

- Customers with less than 1 year tenure → churn rate ~45–50%.
- Customers with 1-2 years tenure → churn rate drops to ~25%.

- Customers with over 5 years tenure → churn rate <10%.
 - ← New customers are at the highest risk of leaving. Loyalty builds over time.

Contracts

- Month-to-month contracts: churn rate ~43%.
- One-year contracts: churn rate ~11%.
- Two-year contracts: churn rate ~3%.
 - Customers with long-term contracts are much less likely to churn.

Services

- Customers without Online Security → churn rate ~42%.
- Customers without Tech Support → churn rate ~47%.
- Customers with these services churn at only ~15–20%.
- Streaming services (TV, Movies) have smaller effects compared to security/support-related services.
 - Lack of support and security services is strongly linked to churn.

Payment Methods

- Electronic check users → churn rate ~45%.
- Mailed check → churn rate ~19%.
- Credit card/Bank transfer (auto-pay) → churn rate ~16%.
 - **Customers paying by electronic check are the highest churn risk group.**



- 1. High churn among month-to-month customers (~43%) → Introduce loyalty programs or discounts for longer contracts.
- 2. Senior citizens (~41% churn) → Provide senior-friendly bundles, discounts, or personalized support.
- 3. New customers (first year churn ~50%) → Focus on onboarding programs to build early loyalty.
- 4. Security & Support services matter → Customers with Tech Support/Online Security churn ~60% less. Encourage adoption through bundling.
- 5. **Electronic check users (~45% churn)** → Incentivize auto-pay via credit card/bank transfer.
- 6. **Gender is not a major churn driver**, so resources should be focused on contract type, tenure, and services.