Key Insights & Actionable Recommendations

1. Overall Churn Rate

- **Insight**: 26.5% of customers churned, while 73.5% stayed.
- **Action**: Focus on reducing churn by targeting high-risk segments identified in the analysis.

2. Tenure & Loyalty

- **Insight**: 45% of new customers (tenure <6 months) churn, compared to <5% for long-term customers (tenure >24 months).
- **Action**: Improve onboarding processes (e.g., personalised support, welcome discounts) to retain new customers.

3. Contract Type Impact

- **Insight**:
  - **Month-to-Month**: 42.7% churn
  - **One-Year**: 11.3% churn
  - **Two-Year**: 2.8% churn
- **Action**: Incentivize longer contracts (e.g., 10% discount for annual plans, loyalty rewards).

4. Payment Method Risks
- **Insight**: Customers using **Electronic Check** churn most, while **Credit Card** users churn least.
- **Action**: Promote low-churn payment methods (e.g., $5 discount for using Credit Card/Bank Transfer).

5. Churn By Gender

- **Insight**:
  - Females are more likely to churn than males, though frequency difference is not much
- **Action**: Female is paying more than male as average monthly charges; therefore, introduce more female-oriented offers.

6. Senior Citizen Retention

- **Insight**: Senior citizens churn **41.7%** vs. non-seniors at **23.6%**.
- **Action**: Offer senior-friendly plans (e.g., discounted tech support and simplified service options).

7. Internet Service & Churn

- **Insight**: **Fiber Optic** users have the highest churn rate (linked to high monthly charges).
- **Action**: Bundle fiber optic with value-added services (e.g., free streaming subscriptions).

8. Predictive Model Insights

- **Top 3 Churn Drivers**:
  1. **Total Charges** (importance: 15.8%)
  2. **Tenure** (14.1%)
  3. **Monthly Charges** (13.4%)
- **Action**: Use AI to flag high-risk customers (churn probability >50%) and trigger retention campaigns.

9. Proactive Retention Strategies

- **AI-Driven Actions**:
    1. Deploy a real-time churn prediction dashboard.
    2. Automate personalized offers (e.g., discounts for high-risk customers).
    3. Prioritize support for long-tenure customers at risk (e.g., targeted loyalty rewards).