Churn Analysis Report

1. Overview

The goal of this analysis is to understand the drivers of customer churn within a telecommunications company. Using a dataset of ~7,000 customers, I explored patterns in customer demographics, service usage, billing behavior, and contract types to uncover key insights that can inform retention strategies.

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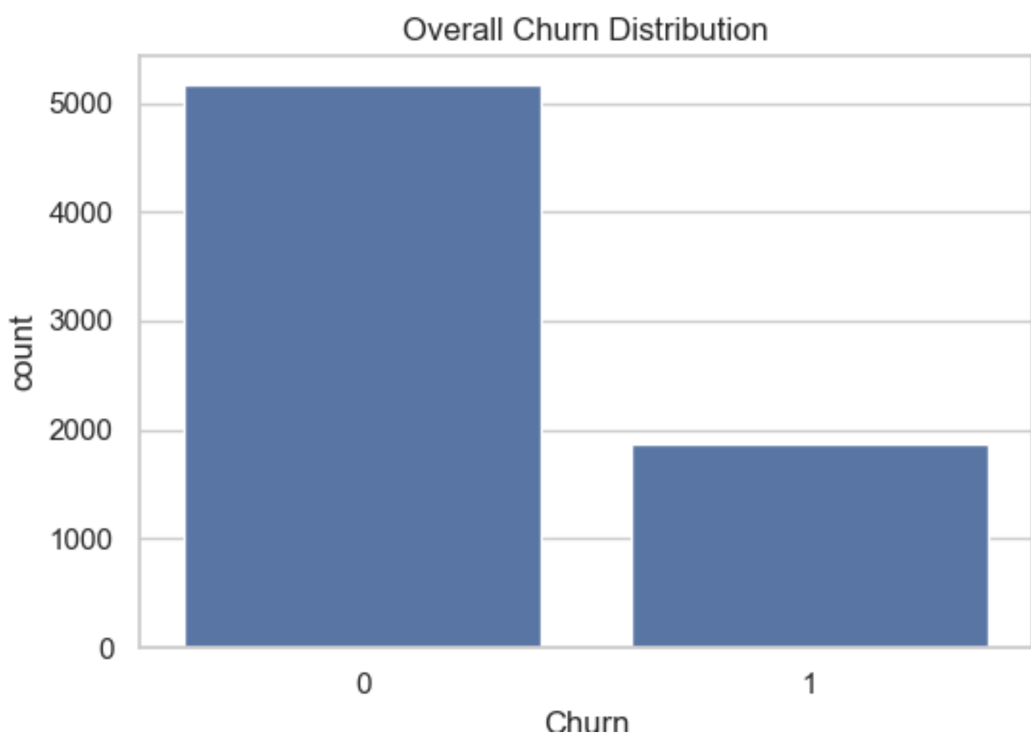
2. Key Findings

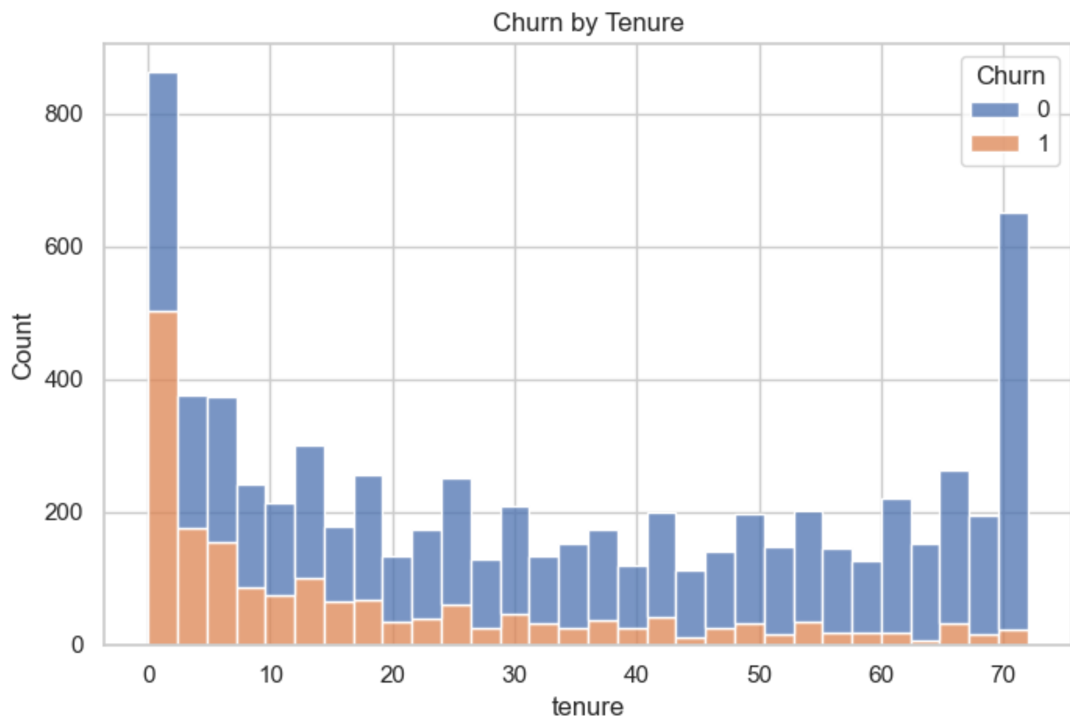
Overall Churn Distribution

- About **26.5% of customers churned** while 73.5% stayed.
- This indicates a **significant retention challenge** that impacts recurring revenue.



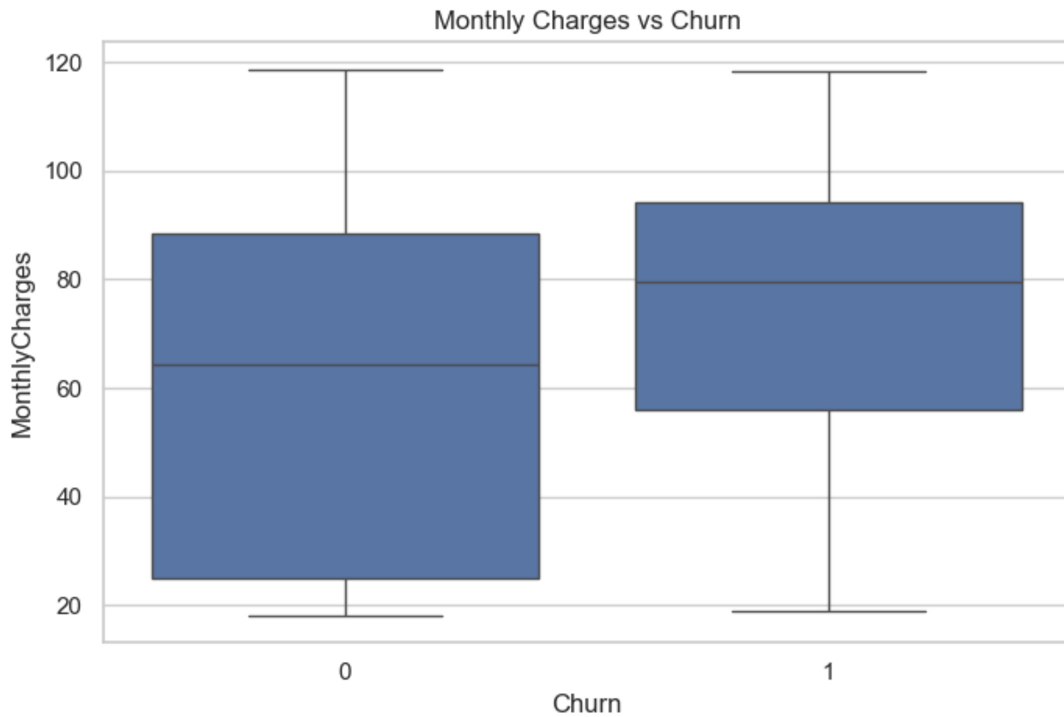
Churn by Tenure

- **New customers (0–3 months)** show the **highest churn rate**.
- Customers with **longer tenure (>2 years)** are much less likely to leave.
- Interpretation: Early-stage experience (onboarding, initial service quality) is critical to preventing churn.



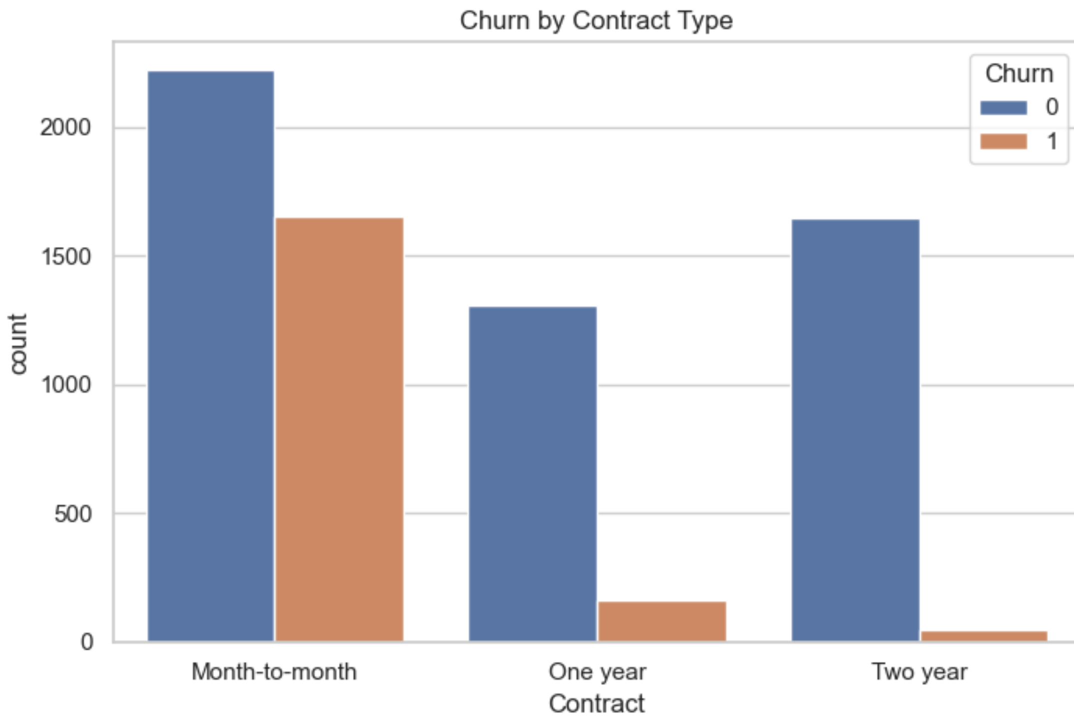
Churn by Monthly Charges

- Customers with **higher monthly charges** tend to churn more often.
- Churned customers had a **median monthly bill close to $80**, compared to ~$65 for retained customers.
- Interpretation: Pricing sensitivity is a major churn driver; customers paying more expect higher service quality.



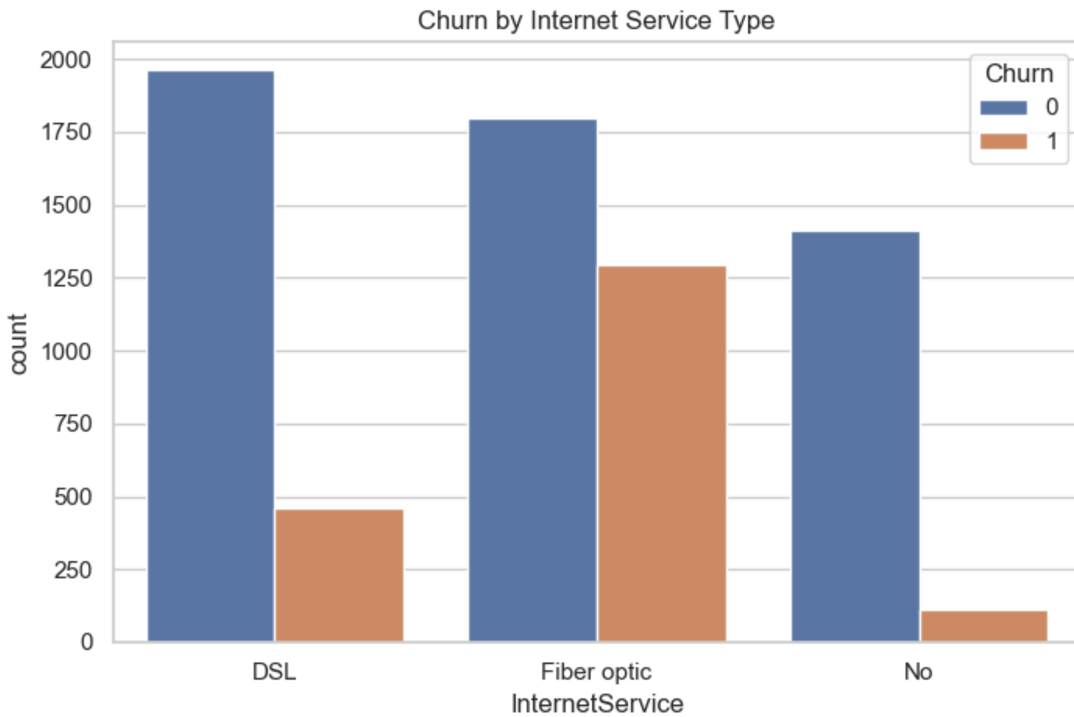
Churn by Contract Type

- **Month-to-month customers** have the highest churn rate.
- One-year and two-year contract customers show **much lower churn**, suggesting that long-term plans improve retention.
- Interpretation: Commitment plans reduce churn, possibly because they come with incentives (discounts, stability).



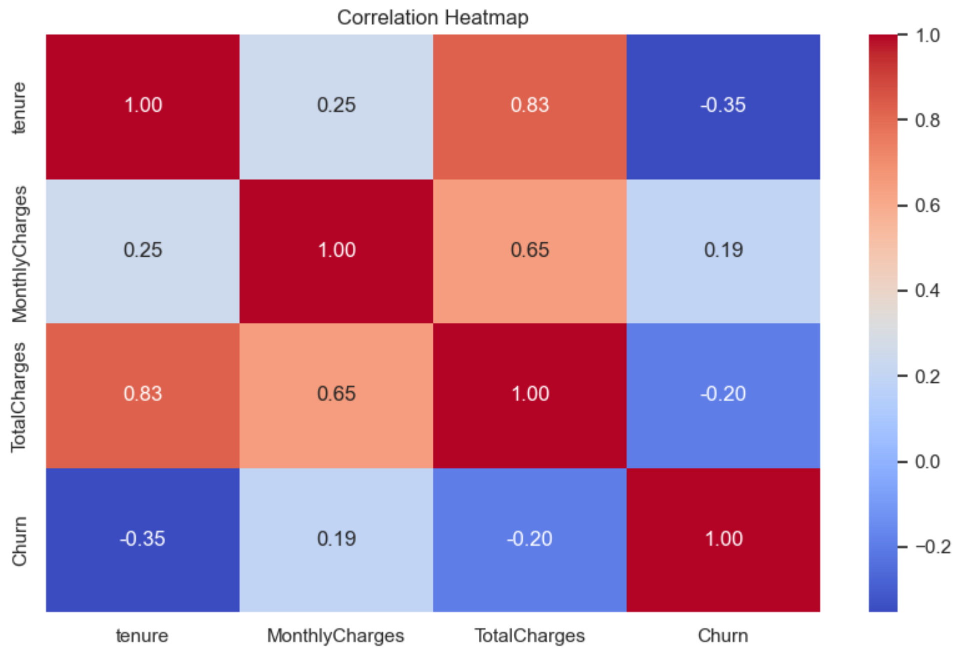
Churn by Internet Service Type

- **Fiber optic customers** churn significantly more than DSL customers.
- "No internet service" customers churn the least, likely because they subscribe to other bundled services.
- Interpretation: Fiber optic services may face quality or cost-related dissatisfaction leading to higher cancellations.



Correlation Analysis

- **Tenure** has a **negative correlation (-0.35)** with churn → longer-tenured customers are less likely to churn.
- **Monthly Charges** has a **positive correlation (0.19)** with churn → higher bills slightly increase churn likelihood.
- **Total Charges** shows weak correlation once tenure is accounted for.
- Interpretation: Retention strategies should focus on **contract structure, onboarding, and pricing** rather than raw revenue metrics.



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3. Business Recommendations

Based on these insights, I recommend:

1. **Strengthen Onboarding Programs**
   - Provide personalized onboarding support and welcome offers for customers in their **first 90 days**.
   - Proactively address service or billing concerns early.
2. **Encourage Long-Term Contracts**
   - Incentivize month-to-month customers to switch to annual contracts via discounts or bundled perks.
   - Highlight cost savings of long-term plans to reduce churn risk.
3. **Review Fiber Optic Service Experience**
   - Investigate customer complaints related to fiber optic plans (pricing, installation, speed).
   - Offer loyalty perks or improved support to fiber customers at risk of churning.
4. **Pricing Strategy Adjustments**
   - Monitor high-bill customers closely with retention campaigns.
   - Provide tiered service bundles to align price with value perception.