

EXECUTIVE SUMMARY REPORT

Project: Task 2 - Customer Churn Analysis - Telco Dataset

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Organization: Future Interns

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Track: Data Science & Analytics

Project Overview

This analysis examines customer churn patterns for a telecommunications company to identify key drivers of customer attrition and develop actionable strategies to improve retention. Using data from 7,043 customers, we identified critical risk factors and opportunities to reduce churn by 20-25% within six months.

Key Findings

1. Contract Type is the #1 Churn Driver

- Month-to-month contracts have a 43% churn rate
- One-year contracts show only 11% churn rate
- Two-year contracts have minimal churn at just 3%
- Opportunity: Converting customers to longer contracts could reduce overall churn by 35%

2. Early Customer Experience is Critical

- 45% of churn occurs in the first 6 months
- 70% of churn happens within the first year
- New customers with fiber optic service churn at 2x the rate of DSL customers
- Opportunity: Improve onboarding and first 90-day experience

3. High-Value Customers are High-Risk

- Fiber optic customers pay 34% more (\$84 vs \$63) but churn 41% more
- Electronic check users churn at 45% vs 19% for automatic payment users
- Opportunity: Targeted retention programs for premium segments

4. Service Quality Drives Retention

- Customers without tech support churn 50% more
- Customers without online security churn 40% more

Financial Impact

Metric	Current	Potential Improvement
Monthly Churn Rate	26.5%	Target: 20%
Lost Monthly Revenue	~\$139,000	Save: \$28,000/month
Average Customer Lifetime	32.4 months	Increase: 6+ months

- Opportunity: Proactive service offering and support

Customer Acquisition Cost Offset	-	Save: 15% on marketing
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Annual Revenue Protection Opportunity: \$336,000

Conclusion

This analysis reveals that targeted, data-driven retention strategies can significantly reduce customer churn and protect revenue. By focusing on contract conversion, improving early customer experience, and addressing service quality issues, we can achieve a 20-25% reduction in churn within six months, protecting over \$300,000 in annual revenue with strong ROI.

CONTACT INFORMATION

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