



Customer Churn Analysis for Telecom Company

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OUTLINE

- **Overview of the Project and Business Goals**
- **Project Objective:** To explore customer churn data, identify key churn drivers, and uncover patterns in customer behavior that can inform strategic decisions to reduce churn and retain high-value customers.
- **Business Goals:**
 - **Reduce Customer Churn Rate** by identifying the main reasons behind subscriber cancellations and analyzing age group distributions to better understand customer behaviors.

OUTLINE

- **Optimize Retention Strategies:** Use customer churn data insights to adjust strategies that enhance customer loyalty and maximize long-term value.
- **Identify Improvement Areas:** Pinpoint specific service aspects or customer segments that require focused interventions, such as tailored offers, improved customer support, or marketing efforts.

Problem Addressed



Data Quality: By cleaning and standardizing customer and service data by Power Query Editor, the analysis ensures a consistent and reliable dataset ready for accurate churn analysis.

Estimation: Imputing missing values in key customer and usage variables helps create a complete picture of churn patterns and customer behavior.

Retention Strategy: Insights from the analysis clarify which factors that most influence churn, guiding targeted customer retention efforts and strategic decision-making.

Churn Demographics Dashboard

Senior	Under 30	Churn Rate
No	No	24.54 %
No	Yes	23.00 %
Yes	No	38.46 %
Total		26.86 %

6687

Count of Customer ID

26.86 %

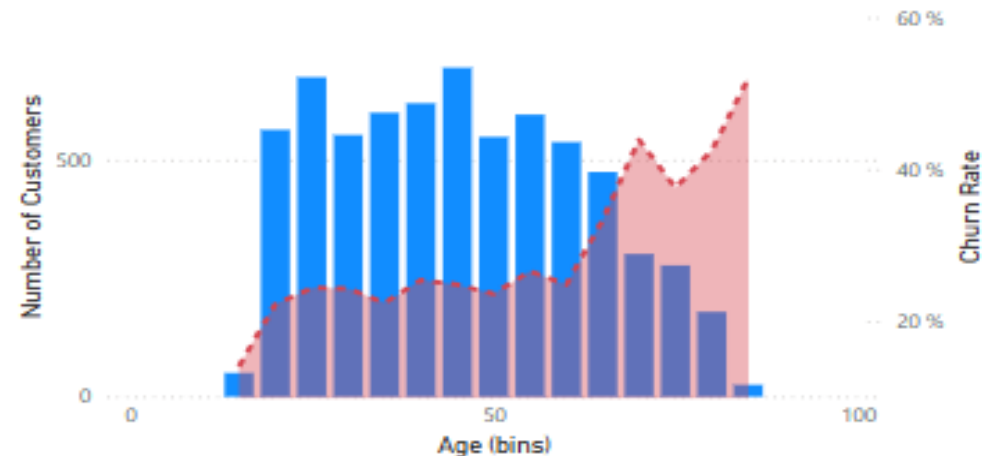
Churn Rate

1796

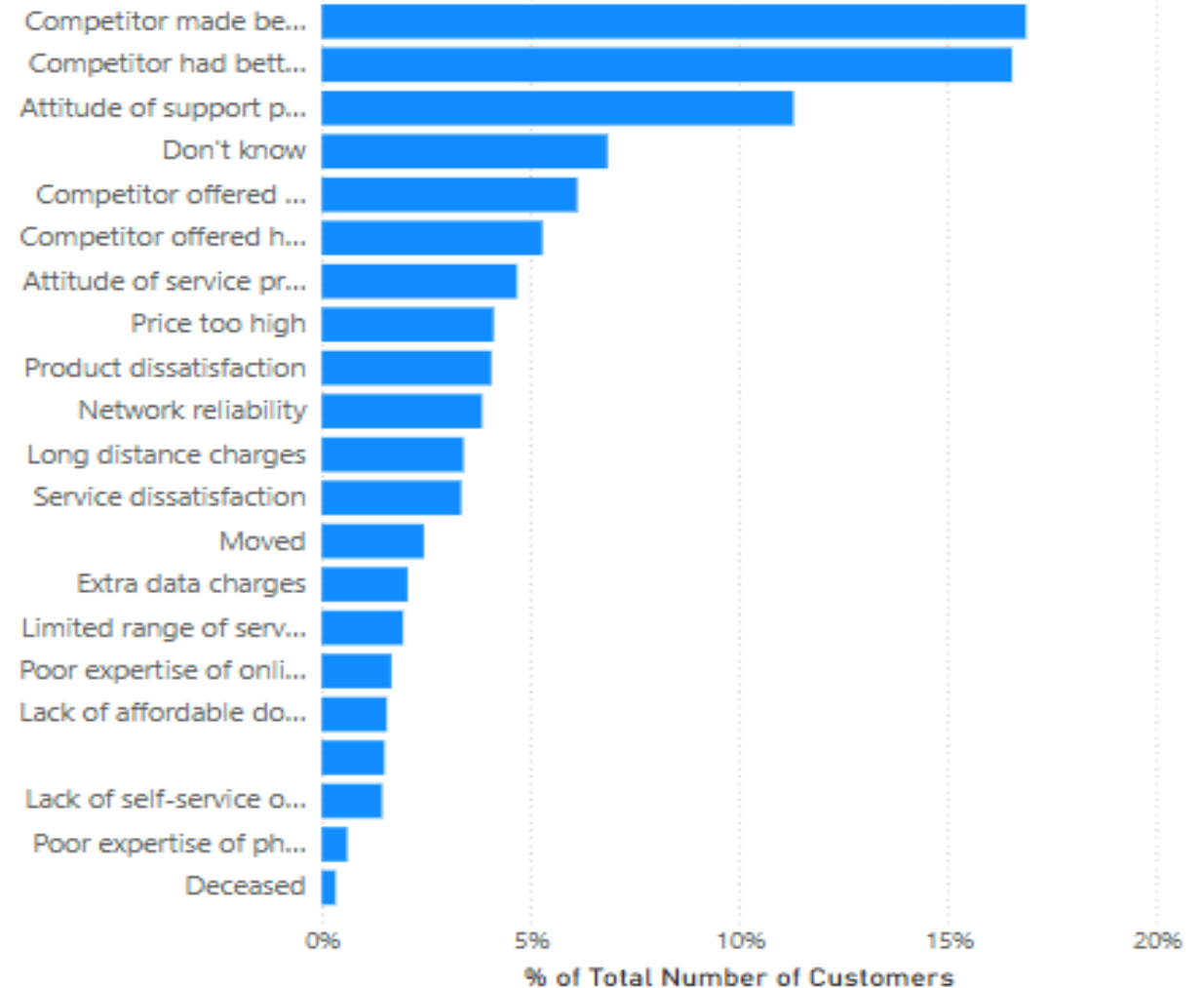
Churned

Number of Customers and Churn Rate by Age (bins)

● Number of Customers ● Churn Rate

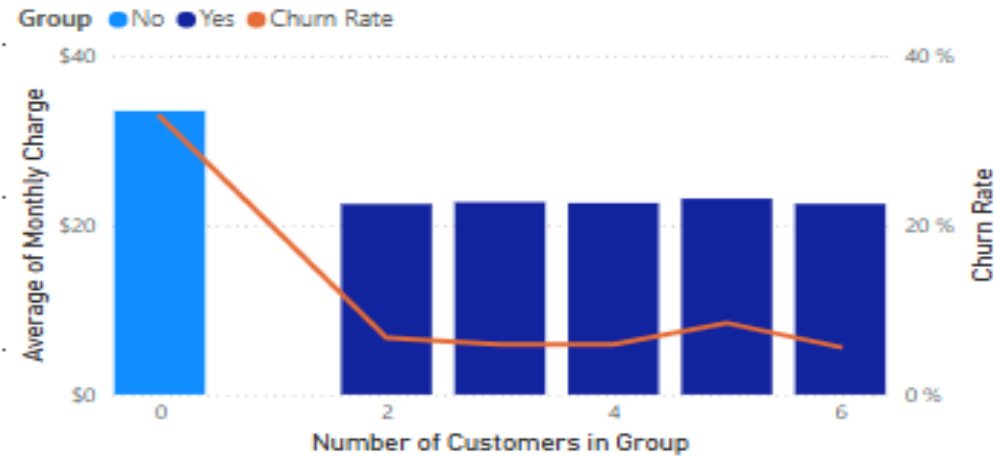


Churn Reasons



Churn Groups and Categories Dashboard

Average of Monthly Charge and Churn Rate by Number of Customers in Group and Group



Churn Rate by Contract Category and Gender

Gender: Female (Blue), Male (Dark Blue), Prefer not to say (Orange)



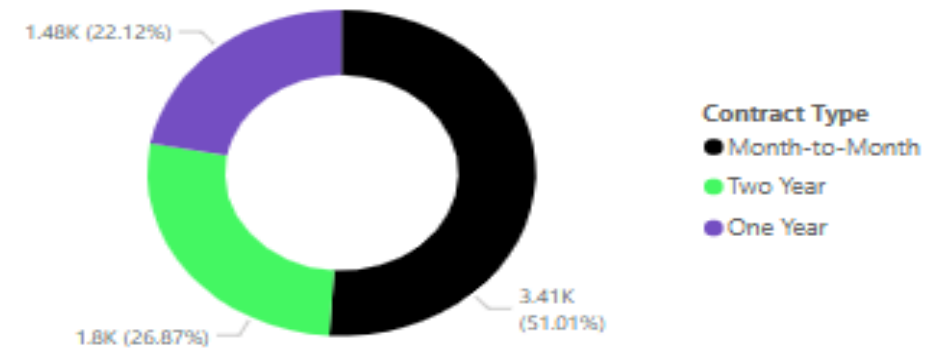
Monthly

46.29 %
Churn Rate

Yearly

6.62 %
Churn Rate

Customers by Contract type



Key Findings

The overall churn rate stands at 26.86%, with the highest churn observed among customers aged 60 and above (38.46%). There is no significant difference in churn rates between genders.

Top reasons for churn:

- Competitors offering better price promotions.
- Competitors providing superior and newer devices (5G phones, smart routers).
- Poor customer support experience.

Customers are not just leaving because of one issue, but due to a combination of high prices, outdated or inferior devices, and poor customer support. The data reveals a strong overlap between price-sensitive and device-driven churn segments, indicating that customers expect both affordability and modern technology in a single offering.

- **Non-contract group** customers are more likely to churn
- **Month-to-month contracts pose the greatest churn risk**, with a churn rate of **46.29%**, compared to just **6.62% for yearly contracts**. The flexibility of monthly contracts may attract short-term users, but it also makes it easier for them to leave. In contrast, **annual contracts foster retention** and loyalty.
- **High monthly charges correlate with higher churn**, suggesting that customers are sensitive to perceived cost vs. value. Those paying more are more likely to cancel unless they see clear benefits in return.

Recommendations to the Business

Incentivize Long-Term Contracts:

- Shift focus away from month-to-month plans by offering compelling incentives for customers to switch to annual contracts. These may include discounted rates, added benefits (e.g., free streaming services or premium support), or loyalty rewards.
- Clearly communicate the long-term savings and added value of yearly contracts to appeal to both budget-conscious and stability-seeking customers.

Review and Optimize Monthly Pricing:

- Reevaluate pricing structures, especially for high-cost plans. High monthly charges are driving customer attrition—ensure that pricing aligns with the perceived value.
- Introduce tiered plans or customizable add-ons to help customers feel they are paying for only what they need, increasing perceived fairness and value.

Enhance Value Perception:

- Highlight and actively promote the tangible benefits customers receive with their plans. Use targeted communications to remind them of service quality, coverage, features, and exclusive perks.
- Implement customer education programs to demonstrate how to get the most out of their services—particularly for older customers who may be underutilizing features.

Thank you