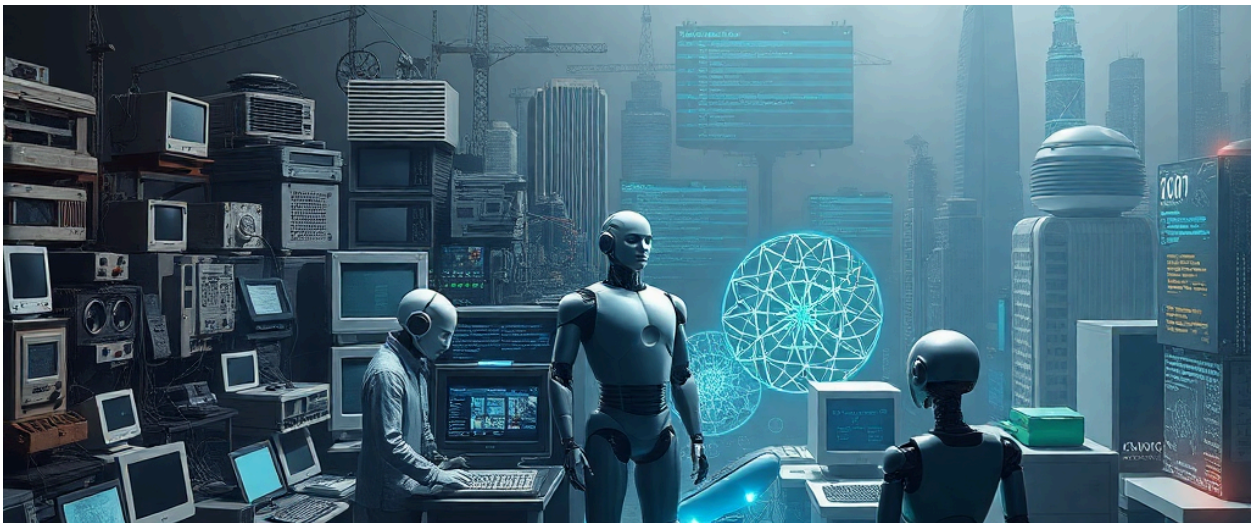

AI-Powered Insights Using Google Sheets + Notion AI

Tools Used:

- **Google Sheets** (Data cleaning and summary tables)
- **Notion AI** (Automated data summarization, narrative generation, and analysis)

Objective:

To leverage AI-powered tools to analyze customer churn data, identify key trends and patterns, and generate actionable insights for improving customer retention strategies.

Churn Rate by Gender

Gender	churned	Churn_total	churn_rate
Female	233	3488	7%
Male	230	3555	6%
Grand Total	463	7043	7%

Churn Rate by Contract Type

Contract	Sum of churn	Count of Churn	churn_rate
Month-to-month	417	3875	11%
One year	41	1473	3%
Two year	5	1695	0%
Grand Total	463	7043	7%

Average Monthly Charges by Churn

Churn	Average of Monthly
No	61.2651237
Yes	74.44133226
Grand Total	64.76169246

Churn % by Internet Service

Internet	Average of churn
DSL	18%
Fiber optic	41%
No	6%
Grand Total	26%

1. Executive Summary

Based on the data shown, here is an executive summary of the key findings:

Overall Churn Rate: The total customer churn rate is 7% across 7,043 customers.

Gender Analysis: There's minimal difference in churn rates between genders, with females at 7% and males at 6%.

Contract Type Impact:

- Month-to-month contracts have the highest churn rate at 11%
- One-year contracts show 3% churn
- Two-year contracts have nearly zero churn (0%)

Monthly Charges: Churned customers have higher average monthly charges ($74.44) compared to retained customers ($61.27).

Internet Service:

- Fiber optic service shows the highest churn rate at 41%
- DSL has an 18% churn rate
- Customers with no internet service have the lowest churn at 6%

2 .SWOT Analysis from data

Strengths:

- Strong customer retention in long-term contracts with two-year contracts showing nearly zero churn (0%)
- Relatively balanced gender distribution in customer base with minimal churn rate difference

Weaknesses:

- High churn rate (41%) among fiber optic internet service customers
- Month-to-month contracts show significant vulnerability with 11% churn rate
- Higher monthly charges associated with churned customers ($74.44 vs $61.27)

Opportunities:

- Potential to convert month-to-month customers to longer-term contracts, given the success of longer contracts
- Room for improvement in fiber optic service retention strategies

Threats:

- Risk of losing high-value customers who pay higher monthly charges

- Potential revenue loss from the significant churn in fiber optic service segment, which likely represents premium service

3. Persona Profiles

Flexible Frank (High-Risk)

- Month-to-month contract subscriber
- Uses fiber optic internet service
- Pays higher monthly charges (~$74)
- Values flexibility over commitment
- High likelihood of churning (41% risk group)

Loyal Lucy (Low-Risk)

- Two-year contract holder
- Basic internet service (DSL or none)
- Pays moderate monthly charges (~$61)
- Values long-term relationships
- Very low likelihood of churning (0-3% risk group)

Premium Pete (Medium-Risk)

- One-year contract subscriber
- Fiber optic service user
- Pays premium monthly charges
- Values high-quality service
- Moderate churn risk (3-18% risk group)

Bargain Betty (Medium-Risk)

- Month-to-month contract
- Basic DSL service
- Price-sensitive customer
- Seeks best value for money
- Moderate to high churn risk (11-18% risk group)

Each persona represents different customer segments based on contract preferences, service choices, and pricing sensitivity. Understanding these profiles can help in developing targeted retention strategies.

Reflection:

This project highlighted the power of GenAI tools like Notion AI to simplify and accelerate data analysis. By integrating Google Sheets for data preparation with Notion AI's advanced summarization, I was able to extract meaningful insights from complex churn data effortlessly. This experience showed me how AI can reduce manual workload and enhance the quality of business intelligence. I now see GenAI as a valuable asset in my domain, capable of supporting data-driven

decision-making and enabling more personalized, targeted strategies by quickly revealing trends and customer behavior patterns in large datasets.