Task 1:

Building an Interactive Dashboard

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Data Storytelling for Varied Audiences — D601

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Accessing the Dashboard

View my colorblind-accessible Tableau dashboard using the link below:

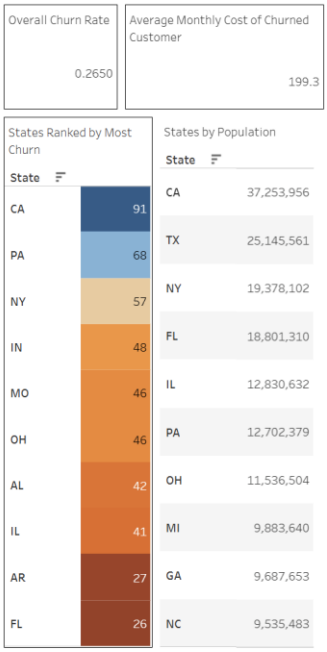
https://public.tableau.com/views/D601_Task1A/Dashboard1?:language=en-US&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link

You can view the dashboard directly without downloading it. However, if your screen is too small to display the tables or values clearly, you may choose to download it by clicking the download button.

If you have Tableau installed on your computer, simply opening the downloaded file will launch the dashboard automatically.

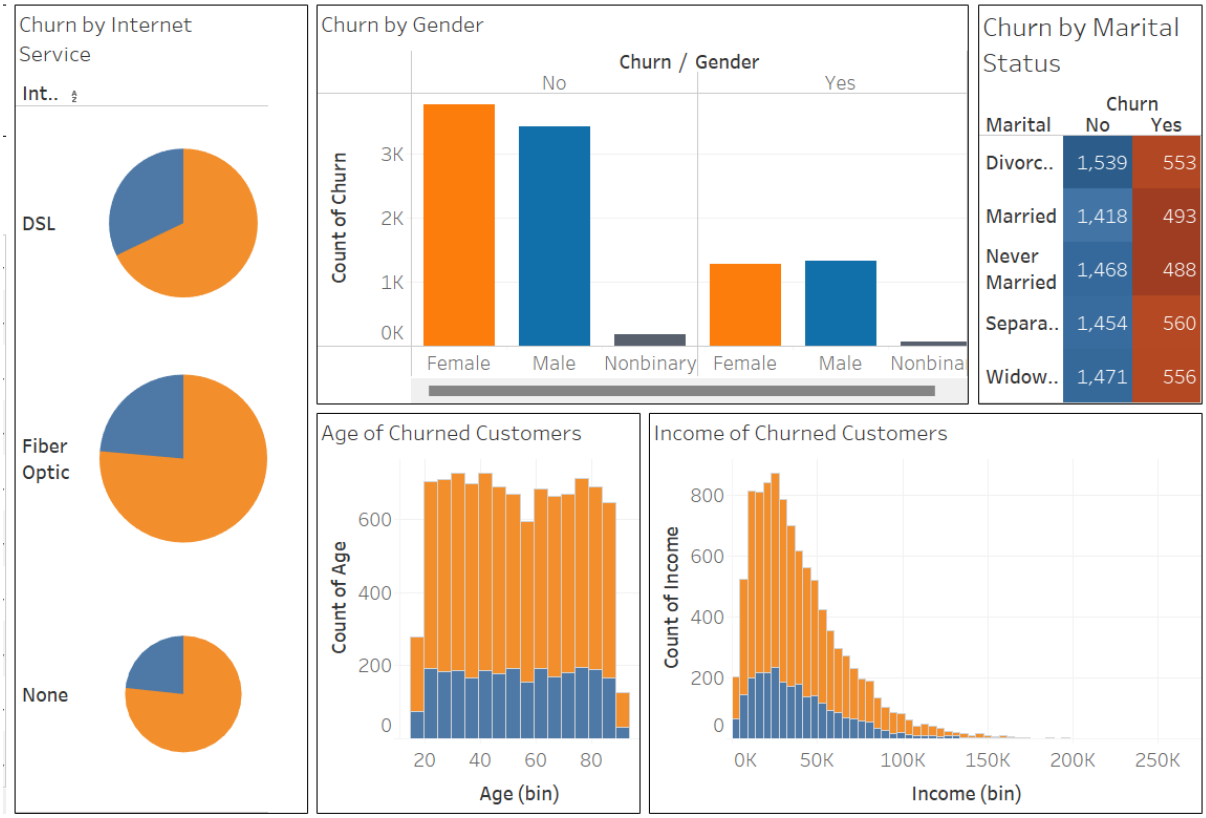
Overview of Visualizations

On the left side of the dashboard, you'll find two Key Performance Indicators: Overall Churn Rate and Average Monthly Cost of Churned Customers. These indicators provide a quick snapshot of how frequently customers are leaving and the associated financial impact.



Just below, there is a map showing the states where most churned customers reside. To provide additional context, I included an external dataset showing the top 10 most populous U.S. states. This side-by-side comparison helps identify which states are overrepresented in churn. For instance, while high-population states like California and New York naturally show higher churn, states like Indiana and Missouri appear disproportionately high despite not ranking in the top 10 by population. These anomalies could indicate region-specific issues worth investigating.

Next are the main visualizations, which are designed to be easy to use and interact with:

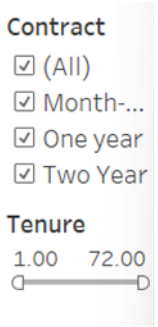


The pie chart on the left breaks down churn by internet service type. In this chart and in all others, orange represents churned customers and blue represents active ones. Tooltips provide additional details when you hover your mouse over any section.

- Bar charts are included to show churn trends by age, gender, and income.

- A table in the upper-right corner shows churn counts by marital status.

Also in the upper-right section is the filter panel.



You can use your mouse to filter churn data by customer contract type (Month-to-Month, One-Year, or Two-Year) using checkboxes. By default, all contract types are selected. When you adjust the selection, the visualizations will update accordingly.

Additionally, there is a tenure slider to filter customers based on how long they have stayed with the company. Both filters can be used together to isolate specific customer segments. For example, you can view customers with Month-to-Month contracts and less than 12 months of tenure**.**

B2: Alignment Between Dashboard and Scenario Needs

The dashboard is designed to address the specific needs outlined in the Telecommunications Churn Scenario:

SVP of Customer Experience: The dashboard highlights churn rates by contract type and tenure, enabling the SVP to identify customer segments with higher churn and develop targeted retention strategies.

EVP of Sales: By providing insights into churn across different demographics and regions, the EVP can tailor sales approaches to address areas with higher churn rates.

COO: The dashboard's visualization of churn by service type and state allows the COO to pinpoint operational issues contributing to churn and implement improvements.

B3: Communicating to Technical vs. Nontechnical Audiences

When presenting this dashboard:

To Nontechnical Audiences:

- Use clear, jargon-free language.
- Focus on visual trends and business implications.
- Highlight key takeaways without delving into complex data analysis.

To Technical Audiences:

- Provide detailed explanations of data sources and methodologies.
- Discuss statistical models or algorithms used.
- Offer access to raw data for in-depth analysis.

To Mixed Audiences:

Begin with a high-level overview for all.

Offer optional deep dives into technical details for interested parties.

Ensure that visualizations are intuitive and self-explanatory.

B4: Storytelling Elements to Engage the Audience

Two storytelling techniques employed in the dashboard are:

Highlighting Unexpected Patterns: By showcasing states like Indiana and Missouri with disproportionately high churn rates, the dashboard draws attention to anomalies that warrant further investigation.

Interactive Filtering: Allowing users to filter data by contract type and tenure empowers stakeholders to explore specific areas of interest, fostering engagement and personalized insights.

References

All materials were provided by WGU.