

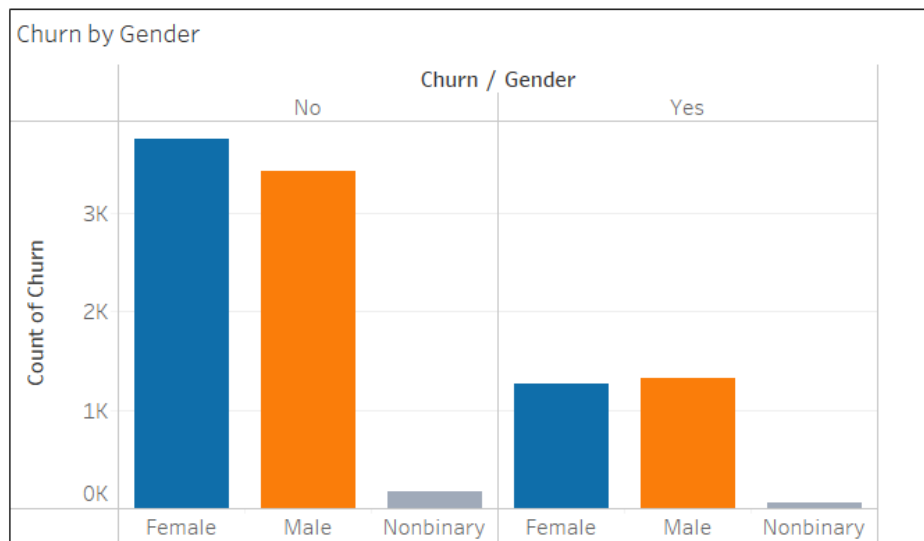
D601 Task 3
By Eric Williams

A1:DASHBOARD ALIGNMENT

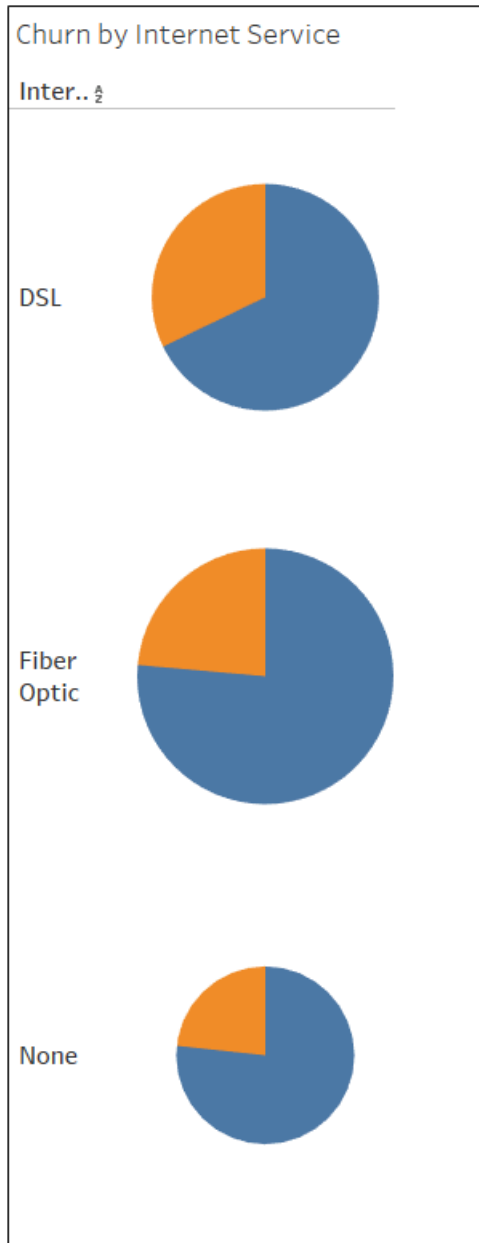
My dashboard included an analysis of average cost of churned customers, overall churn rate, and an exploration of the demographics of customers who churned (age, income, gender, state, marital status, and internet service). The data dictionary gave three leaders in the company. Specifically, the SVP was interested in improving recruitment and retention and the EVP was interested in the demographics across regions. I met these goals by providing an analysis of churned and retained customers across several demographics.

A2:DECISION-MAKING SUPPORT

1. My analysis showed that men were overrepresented in the churning data (shown below). My recommendation would be to shift the product slightly to appeal to men, or to put out a survey to find out why men are churning at a higher rate.



2. My analysis showed that customers with DSL were more likely to churn (pictured below). My recommendation is to analyze whether or not DSL services are lower quality than the others and to improve the experience of people with DSL.



A3:INTERACTIVE CONTROLS

The two filters I added were contract and tenure (pictured below). The contract option allows the data to be seen after being sorted by month-to-month, one year, and two year contracts. With churn data sorted by contract, the company can decide what kind of contracts they should offer to customers and consider changing the contracts with higher churn. Sorting the data by tenure allows us to see churn data based on whether or not the customers are new or old using a sliding scale. Certain packages or deals should be extended to customers who are more likely to leave. If customers who are likely to churn are incentivised to stay with the company, then the business can increase its profits.

Contract

☒ (All)

☒ Month-t...

☒ One year

☒ Two Year

Tenure

1.0072.00

A4:COLORBLINDNESS

When selecting colors, I opted for the colorblind color palette. My dashboard uses mostly entirely blue and orange, and the red that was originally part of the gender visual was changed to a lighter shade of red to differentiate from blue and orange. Also, state and marital status include lighter and darker shades of blue that can easily be interpreted because the brightness changes from one cell to the next.

A5:DATA REPRESENTATIONS

The story I wanted to tell was that certain states and certain demographics were overrepresented in the churn data. This is beneficial because if we can address concerns of customers likely to churn, we can save the company a lot of money by retaining those customers.

Two visualizations shown above visually represent these trends. Customers with DSL and men were more likely to churn. Pictured below, in a side by side comparison of states with the most churned customers and a ranking of all state populations, we can see at a glance that customers from Indiana, Ohio, and Arkansas are overrepresented in the churn data. My recommendation would be to look at the survey results of the overrepresented customers and ask for the reason they churned. If these reasons can be identified and addressed, the company can save a lot of money by retaining customers.

States Ranked by Most Churn		States by Population	
State		State	
CA	91	CA	37,253,956
PA	68	TX	25,145,561
NY	57	NY	19,378,102
IN	48	FL	18,801,310
MO	46	IL	12,830,632
OH	46	PA	12,702,379
AL	42	OH	11,536,504
IL	41	MI	9,883,640
AR	27	GA	9,687,653
FL	26	NC	9,535,483

A6: AUDIENCE ANALYSIS

Task 2 required me to give a simulated presentation to a panel of peers. This is why I chose to include some background information on how I created the visualizations and analyzed the datasets. I did not want to adapt the presentation to the wrong audience as that can leave nontechnical people with a lot of questions about clarity, or it can leave people with a technical background as seeing the presentation as too basic and not tailored to their needs. This is why my goal was to give a specific message by interpreting the data, but I didn't shy away from describing to my peers how I created the visualizations. I described the "how" of the visualizations to the technical audience, but also described the key insights and trends of the data for the business side of the audience. By analyzing the audience being my peers, I was able to adapt to both the technical and nontechnical pieces of the presentation so it was informative, but still had universal access to everyone in the audience by avoiding technical jargon.

A7: UNIVERSAL ACCESS

As mentioned above, my dashboard was created to be accessible to both technical and nontechnical audiences through audience analysis. I described the "how" of the visualizations to the technical audience, but also described the key insights and trends of the data for the business side of the audience. I used universal language to make the document accessible to anyone. I also created interactive controls for easy navigation and worked to create a simple visual design that was intuitive, grouping relevant information together so even people who had never used a dashboard before would find it easy to use. Lastly, I created a dashboard using a colorblind friendly color scheme to ensure everyone could understand it.

A8: EFFECTIVE STORYTELLING

Here are three elements of effective storytelling that I implemented in my presentation:

1. **Clear and Concise Visualizations.** I used simple bar charts and pie graphs that were appropriate for the story and data of what I wanted to represent. They were easy to read and interpret at a glance.
2. **Key Performance Indicators:** I created two KPIs that highlighted the most important numbers for telling the story of the churn data.
3. **Interactive Features:** I provided some interactive features to enhance the storytelling. Interaction changes the story from just something you listen to or look at into something you can *experience*. Being able to sort the data by filtering the type of contract and the tenure of the customers is a great way to get people to interact with the data. Also, creating visualizations that provide more information when the mouse is hovered over the parts increase the storytelling by providing more information on whatever the viewer is most interested in. Essentially, the dashboard is asking the viewer to consider and act on the information about the churn data. The visualizations highlight trends in customer churn and asks two important questions: why are these demographics more likely to churn and what can we do as a business to prevent them from churning in the future?

Sources

No sources were used besides official WGU course materials.