Part 2: Reflection Paper

1. Reducing churn is the primary need of the given dataset. The purpose of the dashboard is to discover what type of customers are at a higher risk to churn in each month. The average churn rate for telecom companies in the United States in 2020 was 21% (Customer churn rate in the United States in 2020, 2021). The dashboard shows variables that help to predict if a customer will churn and key performance indicators.

2. The variables in the additional data set provided further understanding of the trends in the original data set. It also provided a point of comparison for the original data set. As more points of data are available to work with, the picture of what is happening becomes clearer.

3. Two data visualizations that support decision-making are the contract length graphs and the national map. The contract length graphs shows that the largest number of churners are customers with a month-to-month contract. The map shows which states have the largest number of churners. An executive could use this information to make changes in the current retention strategy. They may want to focus more resources on specific states or towards offering longer contracts.

4. Two interactive controls in the dashboard that enable users to modify the dashboard are filter by churn and filtering by states. At the top right of the dashboard, users can filter both the company and competitor by churn, stay, or all. This filter adjusts the key performance indicators and graphs to the selected demographic.

The map can be used to filter the company's information displayed by state. The user can click on the map to select, or they can use the drop-down menu. They can choose one state or multiple states. This filter does not affect the competitor's information as that was not available.

5. I made my dashboard accessible to individuals with colorblindness by selective in the colors used and where they were used. I used Tableau's color-blind palette to create the visualizations. I tried not to use red, green, or colors with them as the base. By using bar graphs, the largest bar is easy to read by length (Wexler, 2017) .

6. Two data visualizations that help to support my story are the key performance indicators and the monthly charges bar graphs. These visualizations give a direct comparison between the company and the competitor.

7. I used audience analysis to adapt my message by thinking about who the audience would be and what they are looking for. The presentation is for executives, and they are looking for answers to larger questions (Rose, 2017). Next, I thought about what actions I wanted the executives to take and built my presentation to build to these actions.

8. To make the presentation assessable to a universal audience, I tried to keep the language as simple as possible. I tried not to use specialized jargon and to include definitions for unknow

words. I included text in the graphs to make key results stand out and easily readable. I also highlighted the key values and made the other columns a light grey. I used a palette that is built specifically for color-blind people. (Knaflic, 2015)

9. The first storytelling element I used was plot. I thought about what the 'imbalance' was and how that could be changed. In this presentation the imbalance is customer churn. The presentation starts with what churn is, show which customers are churning, and ends with how it can be fixed. This engages the audience by drawing them into what is happening. The second storytelling element is the use of affordances. Affordances are things in the design that make it obvious how to use it. This was used in the design of the graphs. The important parts are highlighted, and the distractions are taken out (Knaflic, 2015).

Works Cited

Customer churn rate in the United States in 2020. (2021, February 9). Retrieved September 2021, from Statista: https://www.statista.com/statistics/816735/customer-churn-rate-by-industry-us/

Knaflic, C. N. (2015). *Storytelling with Data: A Data Visulation Guide for Business Professionals.* John Wiley & Sons.

Rose, D. (2017, February 19). *Learnig Data Science: Telling Stories with Data*. Retrieved Sept 2021, from Linkedin Learning: https://www.linkedin.com/learning/learning-data-science-tell-stories-with-data/welcome?u=2045532

Wexler, S. S. (2017). *The Big Boof of Dashboards: Visualizing Your Data Using Real-World Business Scenarios.* John Wiley & Sones.