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D210 – Representation and Reporting

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Western Governors University

Part A

See attached file.

Part A1

See attached files. The bank churn dataset can be downloaded from <https://www.kaggle.com/datasets/santoshd3/bank-customers>.

Part A2

1. Save the Tableau packaged workbook file named D210-charts-dashboard.twbx to your computer.
2. Download and install Tableau Reader (for Viewer) or Tableau Desktop (for Creator).
3. Locate the Tableau packaged workbook file named D210-charts-dashboard.twbx on your computer.
4. Double-click the file to open it with Tableau Reader or Tableau Desktop.

Part A3

To navigate the dashboard, first click on the dashboard tab at the bottom of the screen named Telecom vs Bank Dashboard. There are a total of four charts on the dashboard. Depending on your screen size, you may not see all the charts at once. To view all the charts, use the vertical or horizontal scroll bars.

Each chart on the dashboard has interactive controls that allow you to see different views of the data. To change the data view on the chart, you can select a value from the dropdown interactive controls on the chart.

Part B

The presentation can be viewed at

<https://wgu.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=9ef5cf48-2d6c-4911-8b72-b0b60019d89ft-https://wgu.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=ddf3e446-f3b4-49ed-9907-b0ae002b1394>

Part C1

The dashboard helps executive leaders understand which customers are at high risk of churn based on various demographics.

Part C2

The Bank SVP visualization uses the Gender, Churn, and NumOfProducts variables to display the amount of churn by gender compared to the average number of products. This enhances the

insights by providing an understanding of how executives can optimize the average number of services to reduce customer churn by gender.

The Bank EVP visualization uses the Churn and Geography variables to display the amount of churn by region. This enhances the insights by providing an understanding of how customer location affects churn, and where executives should be focusing customer retention efforts. The Bank SVP visualization displays average number of products as it relates to churn data. The Bank EVP visualization displays regions as they relate to churn data. This insight can be used by executives to determine if average number of products or customer location plays any significant role in churn.

Part C3

The Telecom EVP chart helps executive leaders understand which regional areas have the highest rates of churn (top 10). They can use this information to focus on customer retention efforts in those regions. The Bank SVP chart helps executive leaders understand the amount of churn for each gender when compared to average number of products. They can use this information to find the ideal average number of products that will reduce customer churn.

Part C4

The Telecom SVP chart has two interactive controls, Churn and Gender. The Churn control allows the user to filter the chart by Churn outcome (Yes or No). For example, if the user selects No for Churn, the chart will only display those customers that have remained with the company. The Gender control allows the user to filter the chart by Gender (Female, Male, or Nonbinary). For example, if the user selects Male, it will only show Churn data for Male customers. The user can also select values in each control to view any combination of Churn/Gender options. For example, if the user selects No for Churn and Female for Gender, the chart will display the number of Female customers that remained with the company.

Part C5

The dashboard was built to be accessible for individuals with colorblindness by applying the Colorblind color palette to each chart. (5 Tips on Designing Colorblind-Friendly Visualizations, n.d.)

Part C6

The Telecom SVP chart supports the story by highlighting a key characteristic of customers that choose to leave the company. The Telecom EVP chart supports the story by emphasizing the regions that need to be prioritized for reducing churn rates.

Part C7

The information in the data dictionary allowed me to analyze the audience to adapt the message in the presentation to the needs of executive leadership. The message was adapted for the Senior Vice President for Customer Experience by showcasing information about key customer characteristics that may contribute to churn rates. The message was adapted for the Executive Vice President of Sales by displaying demographic information of customers by region.

Part C8

The presentation was designed for universal access by all audiences by enabling or adding accessibility features. All elements of the dashboard were arranged in an order that is easier/sensical for someone navigating the dashboard with a keyboard. For the KPIs, alt text was added. For the interactive controls, they were set to dropdown format which allows for keyboard navigation and selection within the controls. (*Build Dashboards for Accessibility*, n.d.)

Part C9

The presentation implemented focus on the audience needs, as well as clear presentation of information, as elements of effective storytelling.

Part D

Kumar, S. (2019). *Bank Customers Churn* [Data set]. Kaggle. <https://www.kaggle.com/datasets/santoshd3/bank-customers>

5 Tips on Designing Colorblind-Friendly Visualizations. (n.d.). Tableau. <https://www.tableau.com/blog/examining-data-viz-rules-dont-use-red-green-together>

Build dashboards for accessibility. (n.d.).

Tableau. https://help.tableau.com/current/pro/desktop/en-us/accessibility_dashboards.htm