D601 VKN1 Task 3

Reflection Paper

Shanay Murdock
smurd32@wgu.edu
011377935

D601 Data Storytelling for Varied Audiences
MS, Data Analytics

A. Interactive Data Dashboard

A1. Dashboard Alignment

The Data Dictionary for the Churn dataset includes the concerns and expectations from the company's Senior Vice President for Customer Experience and Executive Vice President of Sales. Both showed interest in wanting to understand customer demographic data and how they may drive customer behaviors and differences between regions and area types.

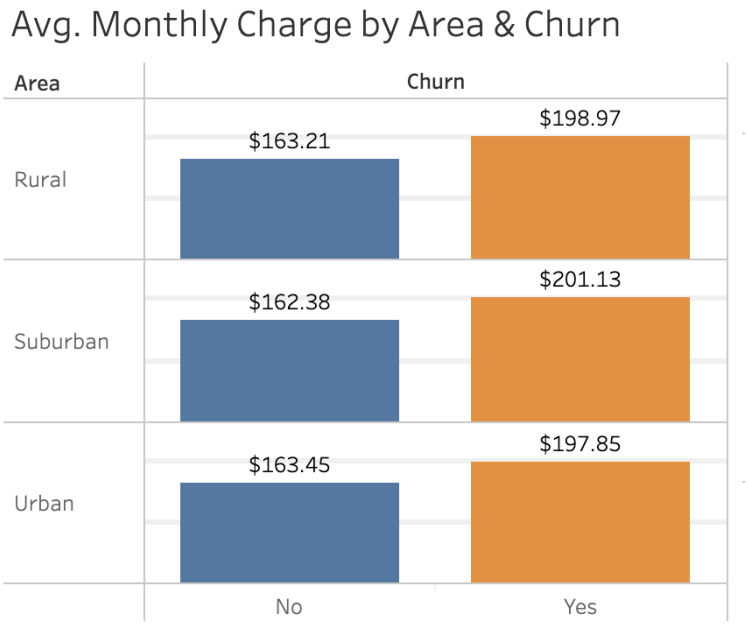
My dashboard includes KPIs for the average churn rate, average monthly charge across all customers, as well as visualizations including a map graph laying out the number of customers per state, and bar graphs for average monthly charge and churn rate by area type, churn rates by gender, churn rates by tenure (measured in years), and churn rate by type of contract. The KPIs provide immediate context for the urgency of the churn situation by indicating the high churn rate as compared to the industry average and by providing a financial baseline of average monthly charge that can be used for financial analysis.

This design effectively aligns with the audience's expectations by providing insights into critical demographic factors and identify price sensitivities across the various customer demographics. This enables decision-makers to pinpoint specific customer segments experiencing high churn rates, thereby facilitating the implementation of targeted retention strategies.

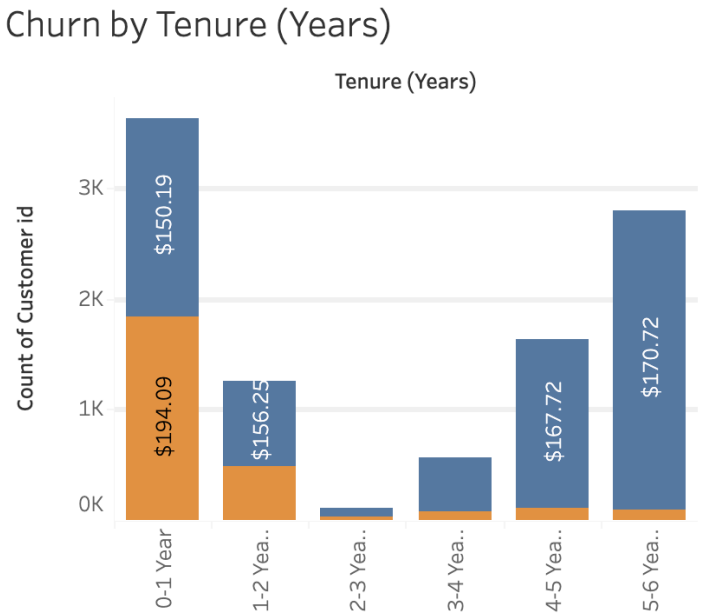
I have also developed a new concept called "quiet churning," which borrows from the idea of "quiet quitting." "Quiet quitting" is roughly defined as employees who put in the minimal viable effort to do their jobs and don't do anything more than absolutely necessary. I've borrowed from this idea to present the idea of "quiet churning"--where we lose our customers without any real feedback on where they are dissatisfied or where a competitor is offering a better solution.

A2. Decision-Making Support

The first graph I wish to draw our attention to is that of the Average Monthly Charge by Area and Churn. This separates the customers by their area type (rural, suburban, and urban) and then provides the average monthly charge comparison for those who did churn (orange) versus those who didn't churn (blue). My analysis showed that those who did churn were paying much higher monthly rates on average across all area types, by about $34-38 on average per month.

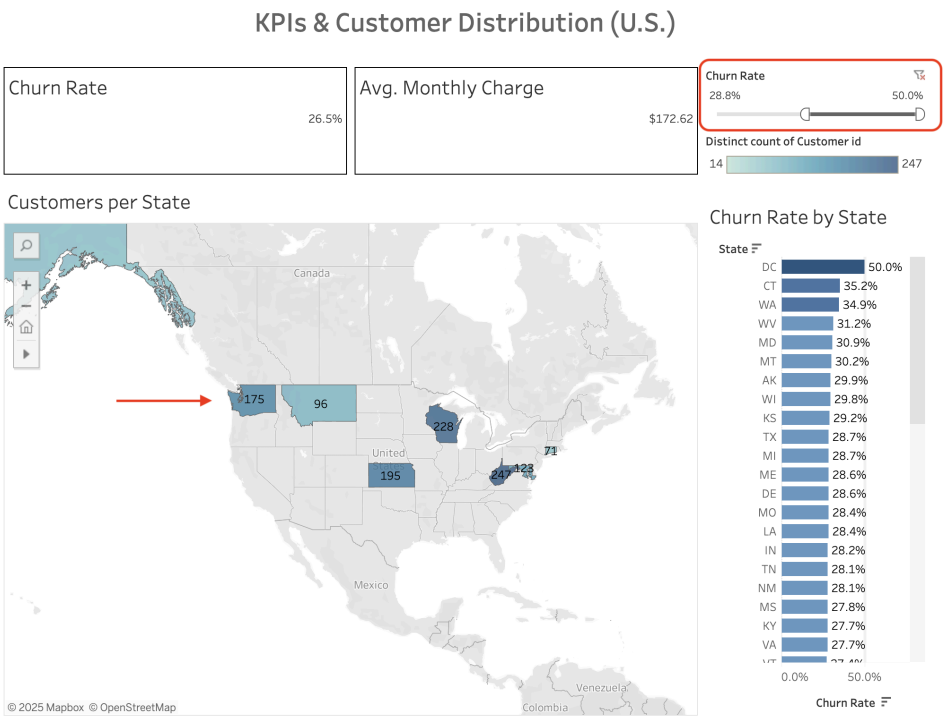


The next graph I wish to draw our attention to is the Churn by Tenure (measured in years). The stacked bar graph indicates the total number of customers broken down by their length of tenure measured in years, plus, the average monthly charge per customer segment (blue indicates the customer did not churn, orange represented the customer did churn). From this graph, we can see that customers in the 0-1 year range are by far those most likely to churn and pay a higher monthly charge on average in comparison to those who stay with the company. From this, we can see that those customers that make it to 3-5 years tenure are vastly more likely to remain customers and that retention efforts would be best aimed at those who have been with the company for 0-2 years.

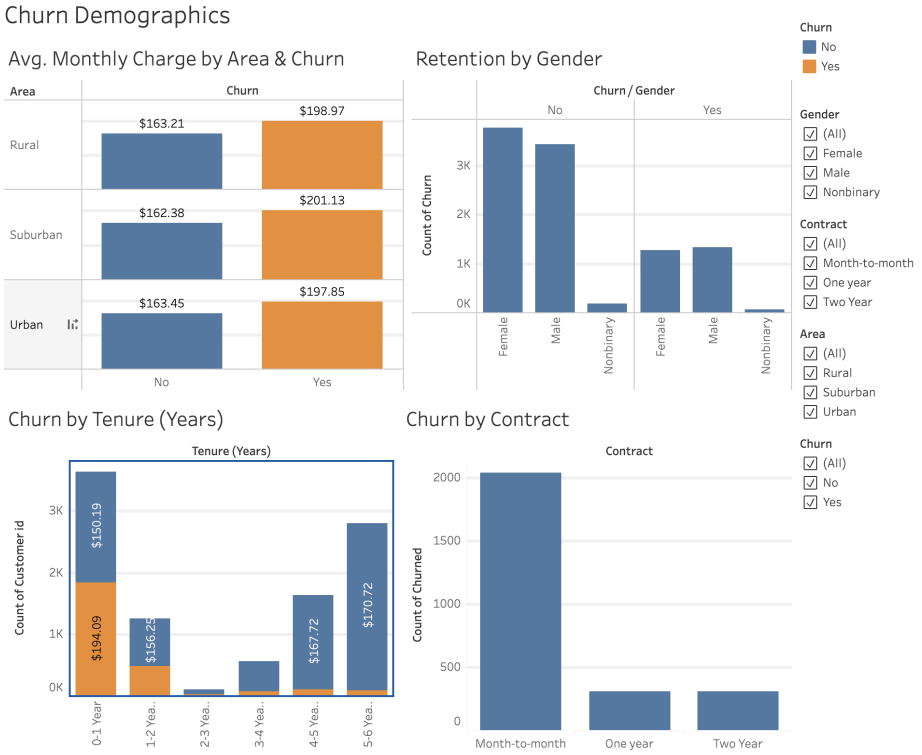


A3. Interactive Controls

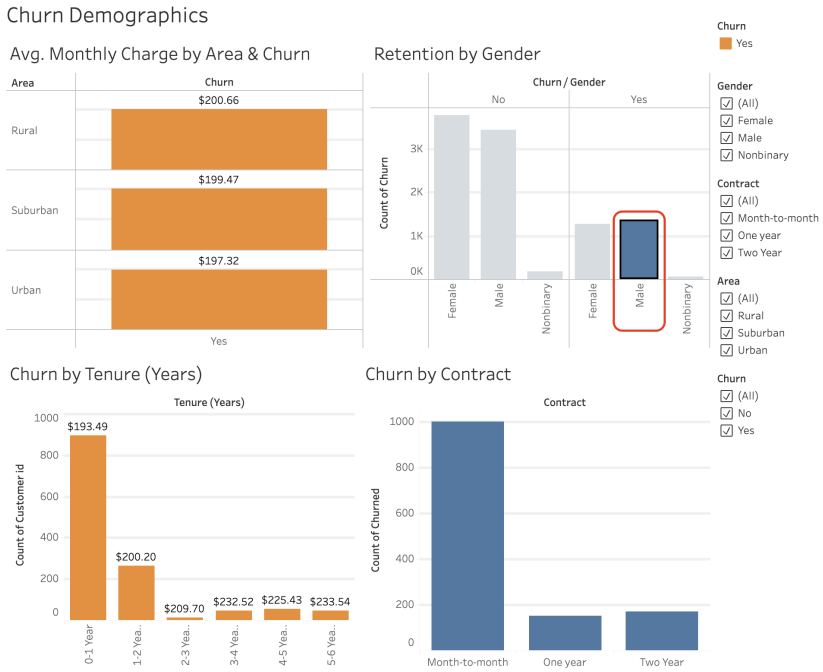
One of the options to modify the data presentation is on the KPIs & Customer Distribution dashboard. There is a Churn Rate slider (red box) that allows you to change the range of churn percentage you are looking at. When the range changes, only the states on the map visualization remain with the data specific to that range as shown in the screen shot. This allows decision makers to quickly get an idea of what markets to target based on churn rate.



The next visualization example is a side-by-side comparison of the Churn Demographics dashboard. The first image shows the dashboard in its neutral state, showing all available data.



The second visualization shows a drilled down version where you can select a specific element, in this case the males that churn (see the red box in the Retention by Gender graph) and how it changes the rest of the visualizations on the page to filter for the demographic data only pertaining to males that have churned.



A4. Colorblindness

When selecting colors for the dashboard, I chose the default Tableau color palette as it is made with colorblindness already in mind, choosing high contrast colors that oppose each other on a color wheel. I chose to limit my color distinctions to only two factors: a blue scale from dark to light (dark representing higher churn rates, light representing lower churn rates) on the geographic data, and blue and orange across the demographic data to distinguish customers that have not churned from customers that have churned. I specifically avoided any red-green combinations which are particularly difficult for those with the most common type of colorblindness.

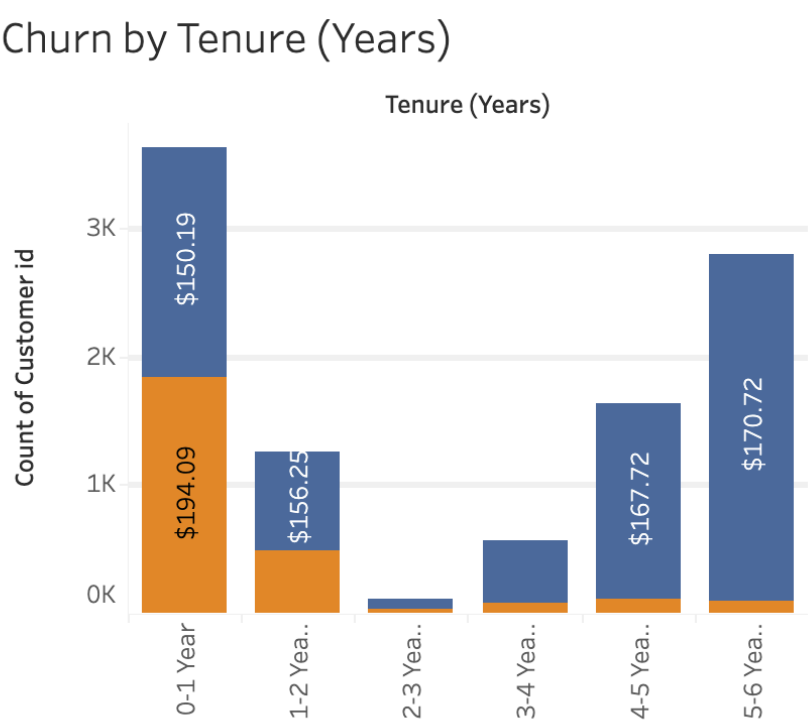
I chose not to add any additional colors to additional demographic factors like gender or contract type to avoid any confusion or overlap where the same color could have different meanings. Because of this, blue is considered a default color for customer information and orange is only used to highlight where customers have churned. There is also a legend on each page that corresponds with any graphs that features more than one color.

I also used text labels where appropriate to add additional information at a glance, like Average Monthly Charge, so decision-makers could quickly gain context.

A5. Data Representations

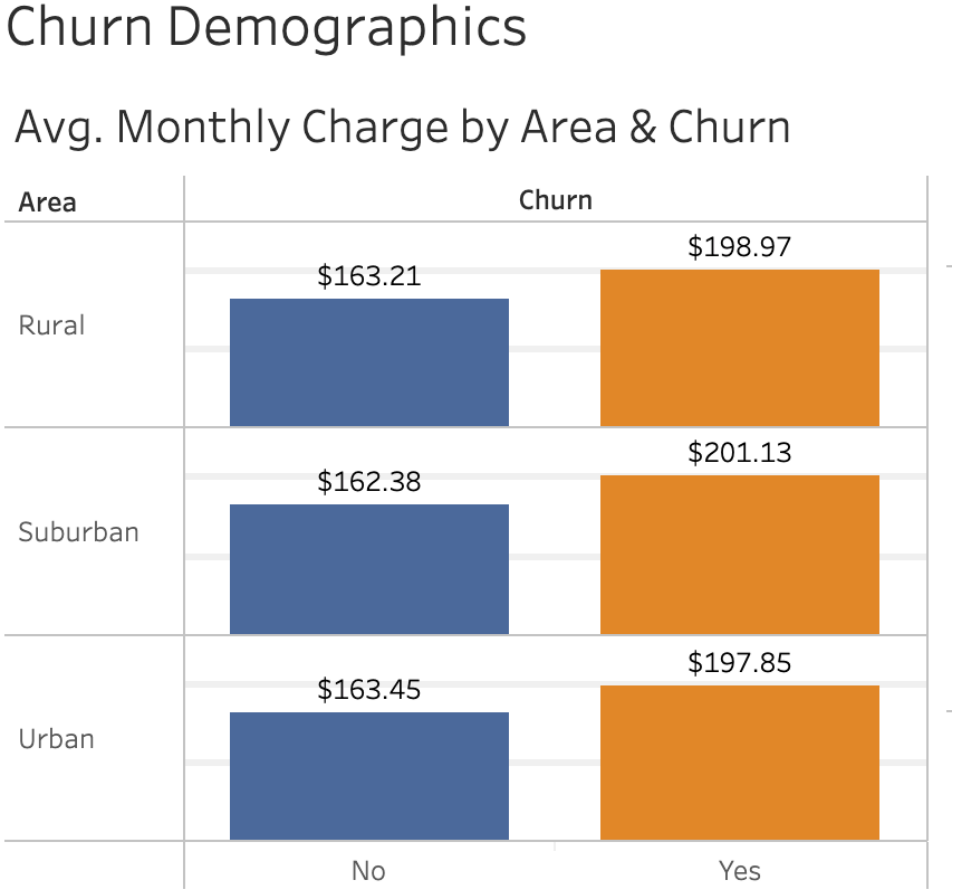
The stacked bar graph (below) displaying churn rates by customer tenure directly supports my “quiet churning” narrative by revealing the critical period where customers in the 0-1 year bracket are most vulnerable to leaving. There is a secondary risk period in the 1-2 year bracket. A dramatic drop-off in churn occurs once customers reach the 2 year milestone with the company. This reinforces my claim that if we can successfully navigate customers through these early periods of vulnerability, we can dramatically increase the likelihood of long-term retention.

To further amplify the visualization’s persuasiveness, I’ve included the average monthly price per customer to differentiate between churners and non-churners. This shows that those who leave the service early are paying approximately $45 more per month than those who are staying with the company. This directly supports that price sensitivity is a key driver behind quiet churning behavior.



The bar graph (below) comparing average monthly charges across rural, suburban, and urban areas for both churned and retained customers illustrates the consistent message that price sensitivity is a pattern regardless of geography. This visualization supports my story by demonstrating that in every area type, customers who are leaving are paying significantly more (at least $34 per month on average) than those who stay with the service.

This representation transforms abstract concepts about price sensitivity into concrete, quantifiable evidence that supports the central narrative about customers quietly leaving when they perceive inadequate value for their money. The visualization's consistency across different area types strengthens the story by showing this isn't an urban or rural phenomenon, but a fundamental pattern in customer behavior across all demographics.



A6. Audience Analysis

In developing my presentation, I carefully analyzed two distinct audience groups: the immediate audience of data analytics peers and the executive audience who would be the ones to act on the recommendations.

For my analytics peers, I structured the presentation to include:

- Technical context about visualization methods and data transformation (such as converting tenure measured in months to tenure measured in years)
- Explicit statistical patterns
- A transparent discussion of methodology

For the executive audience, I structured the presentation to include:

- Framed insights in terms of business impact rather than technical metrics
- Translated data patterns with clear financial implications (the cost of customer acquisition versus retention)
- Actionable recommendations with implementation specifics

- A concept called “quiet churning” to create an accessible framework for understanding technical findings

By layering these approaches, my presentation demonstrated technical rigor to satisfy the immediate audience of data analytics peers while modeling effective storytelling and executive communication. Being aware of two audiences helped shape everything from the choice of visualizations to language choices.

A7. Universal Access

I designed my presentation for universal access through several deliberate strategies:

- **Multimodal information presentation:** Key insights were conveyed through both verbal explanation and visual representation, ensuring accessibility regardless of learning or processing preferences.
- **Clear textual labels and annotations:** All visualizations included labels and titles that convey the meaning of each chart regardless of color.
- **Consistent structural organization:** The presentation followed a logical problem-solution framework (situation-complication-resolution) that provides navigational clarity for all audience members.
- **Avoidance of jargon:** Technical terms were either explained in context or replaced with more universally understood language.
- **Storytelling framework:** I created the “quiet churning” narrative to provide an accessible conceptual framework that helped make complex data patterns understandable regardless of technical background.
- **Visual accessibility:** As described in A4, the visualizations were designed with colorblind accessibility in mind, using appropriate contrast and supplementary labels.

A8. Effective Storytelling

Use of metaphor

I implemented the “quiet churning” metaphor as a storytelling device that transforms abstract churn statistics into a relatable human behavior pattern. By connecting the business concept of customer attrition to the familiar feeling of silently abandoning unsatisfactory services (and giving real-world examples of where this kind of behavior occurs), this storytelling element was intended to:

- Create immediate cognitive engagement by engaging the audience’s personal experiences
- Establish an emotional connection to what might otherwise be viewed as dry statistical patterns
- Provide a memorable framework that persists after the presentation concludes
- Frame the problem in a way that naturally suggests solution approaches (e.g. capturing feedback before customers quietly leave)

This storytelling element was used effectively in the beginning and conclusion, paired with recommendations and the calls to action, creating a narrative arc that helped the audience process the technical information presented in between. One of the recommendations I wanted to persuade the audience to act on was to launch a pilot retention program targeting first-year customers in the top three highest-churn states, creating touchpoints that invite feedback before customers quietly churn.

Data-Driven Narrative Progression
I implemented a data-driven narrative progression that built from general churn patterns (overall churn rate) to patterns with increasingly specific insights (pricing sensitivity and month-to-month service). This storytelling approach:

- Started with the overall churn rate (26.5%) to establish urgency, as this is at the high end of the industry
- Moved through geographic patterns to provide context
- Progressed to demographic and service-based patterns
- Provided critical tenure insights that revealed specific intervention opportunities
- Concluded with recommendations directly tied to the presented data patterns.

Persuasive Elements
My presentation is designed to persuade the audience to:

- Recognize that many customers leave without providing explicit feedback (“quiet churning”)
- Acknowledge that early customer relationships (0-2 years) represent the highest vulnerability and that pricing sensitivity and lack of contract are significant key factors
- Act on specific data-driven interventions that address price sensitivity and contract structure

The clearest example of this persuasive approach is the coverage of the tenure analysis, showing dramatically higher retention rates after customers pass the 2-3 year milestone. This data point provides evidence that intervention efforts should focus on the first 2 years of the customer relationship, with particular emphasis on the higher price points and contract conversions from month-to-month to one- or two-year contracts.

B. Sources

Only WGU Course Materials were used.