Storytelling Project Specifications

Scenario: You're working as a Data Scientist at a Telecommunications company and the VP of Operations comes to you and says, *"We need to reduce customer attrition! Our customers are leaving us for competitors at way too high a rate. Our VP of Sales says removing the month-to-month plan is NOT an option. I already know those customers leave the most, so I want you to focus on only the customers on the Month-to-Month plan. What do you think is driving them to churn? What can we do to try to keep these customers from leaving?"*

Business Goal: Reduce customer attrition, a.k.a. Churn, among the customers on the month-to-month plan. Why? Because keeping customers is cheaper than getting new customers.

Project Goal: A 3 minute presentation that communicates what you found, what your recommendation is, and how you expect the recommended action(s) to decrease the attrition. Your presentation will include:
- **a chart** that undeniably demonstrates the source of attrition that you focused on.
- **a single recommendation,** backed by data**,** that we would expect to reduce **some** of the attrition we are seeing.
- **a chart** that visualizes what you would expect to see, in terms of reduction in churn, if the recommendation is taken.

Presentation: You will present on Zoom. You will have **3 minutes**; this means you must really, really work to include only the most important information. You will be cut off at 3 minutes and 30 seconds. Why? Because the attention of your audience of executives will likely be gone by 3 minutes.

Deliverables:
1. Live presentation
2. Link to presentation slides
3. Video file of one of your early run-throughs of your presentation
4. Screenshot(s) of your Tableau charts *before* going through the refine steps.

Audience: VP of operations + their team attend your presentation. VP of Sales will receive the presentation (hint -> you will want to include a few appendix slides going into the methodology a bit for the VP of Sales to review later).

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Guide to Achieve Goals:

1. **Come up with a recommendation:** Find **one** driver of churn among your sample (those on the month-to-month plan). Not all of them, not the best one, not the magic bullet, but ONE driver.
   a. **How to find a driver of churn:** Using exploratory visualization techniques in your Excel workbook or Google Sheet, which you have already done. Therefore, you have likely already found one driver. If you have not, add a few more visualizations to your workbook to arrive at an answer. *Spend no more than 1 hour on this step*.
   b. **How to decide what to visualize for exploration: Ask questions** that your chart or plot will answer. Example questions include: Do the services a customer has affect retention? Do customers that have been with the company longer pay more for service? Do customer demographics play a role in churn? Is there a payment method that seems to play a part in churn? (You can format your questions in a more analytical way that allows for testing/answering these questions. See the next item for guidance.)
   c. **How to format your questions:** So, given that your goal is to see if there is a difference in the rate of churn or number of customers who churn:
      i. Is there a difference in the rate of churn for **month-to-month** customers who are **senior citizens** vs. customers who **are not**?
      ii. Is there a difference in the rate of churn for **month-to-month** customers who have **fiber internet** vs. customers who **do not**?
      iii. Is there a difference in the rate of churn for **month-to-month fiber** customers who are on **automatic payment** vs. customers who **do not**?
      iv. Is there a difference in the rate of churn for **month-to-month dsl** customers who have **dependents or a partner** vs. customers who **do not**?
      v. Is there a difference in the rate of churn for **month-to-month phone service** customers who have **one line** vs. customers who have **two lines**?
2. **Create your story:**
   a. **For the framework of the presentation slides** , systematically walk through, without a digital tool, each of the steps in the **Create Stage** from Prepare through Prototype. You will not create a prototype of your charts in this step, just an indicator of where each chart will go on your slides. Your presentation (and almost all presentations from here on out) should include:
      i. Title slide
      ii. Agenda slide
      iii. Executive summary slide. (Your Big Idea, Goal, key finding(s), recommendation).
      iv. Overview about your data sample to give context...who are they? are they a subsample of the original? How many people are churning over all? Establish the problem. Yes, we have an issue!
      v. Visualization of the issue you found
      vi. Recommendation you are making
      vii. Visualization of changes expected if action is taken.
      viii. Conclusion and next steps ("with more time, I would like to…", e.g.)

     ix. Appendix slides are included with info such as…
        1. a data dictionary (data definitions)
        2. sample explanations (i.e. the subset, the types of customers (month-to-month, internet only customers, e.g.)).
        3. an aggregate table of summary data in the background of your chart(s) (this can be created easily in tableau...right click on chart and say "create crosstab").

  b. **For each or your charts**, systematically walk through, without a digital tool, each of the steps in the **Create Stage** from Prepare through Prototype.

3. **Develop your story in Tableau:**
  a. Your charts and presentation will be created in Tableau.
  b. You will use your Tableau charts to create your presentation slides or you can create a Story using Tableau if you want to go deeper into Tableau.

4. **Refine:**
  a. Walk through the steps to critique each of your charts.
  b. Review the "How we See" concepts in the "Understand" lesson. Are there changes you can make to optimize for how we see?
  c. Refine to impress - https://ds.codeup.com/storytelling/refine/#refine-to-impress
  d. Refine to persuade - https://ds.codeup.com/storytelling/refine/#refine-to-persuade
  e. Refine to empower - https://ds.codeup.com/storytelling/refine/#refine-to-empower
  f. Ensure all is ethical - https://ds.codeup.com/storytelling/refine/#be-ethical

5. **Present:**
  a. Identify/Document your Big Idea (This will be included on your Executive Summary slide).
  b. Remind yourself of your audience, your goal, and your setting. Is your content, both visual or verbal components, ideal to answer these questions?
  c. Write a script or outline to be sure you communicate your key points at the right time and in a powerful way!
  d. Practice 3 times, record the 3rd time. To keep it under 3 minutes, you have to practice, you have to know what you are going to say, and you have to time your run-throughs.
  e. Watch your recording and make notes, any edits, etc.
  f. Practice any edits until you feel comfortable and concise.
  g. Finally, deliver to class!