Storytelling Project Steps 1-2

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Step 1- Find a driver of churn

A. Python was used for exploration of the dataset.
B. What features have the highest correlation with churn?
    a. Correlation plot and heatmap were used for preliminary examination.
    b. The features involved with internet service type had high correlation with churn.
C. Take a deeper look at internet service type:
    a. Do the different internet service types have different churn rates?
    b. Does whether or not the customer has autopay influence these churn rates differently?
    c. More than one hour has been spent exploring the drivers of churn.

Systematically Creating a Data Story

1. Man-in-hole story framework for presentation
   a. We were doing well, then we had lots of churn
   b. Here are some drivers of the churn
   c. Here is a remedy
2. VP of sales and VP of operations are the audience
   a. They are familiar with the data in a big picture sense
   b. They are familiar with common graph types
3. Online Zoom 3 minute presentation to address a driver and remedy of churn
4. Internet service type and autopay influence churn
   a. Heatmap to show the biggest drivers of churn (internet service type is prominent)
   b. Bar graphs or tree graphs to further explore the drivers of churn (internet service type & autopay)
5. Tableau would be a good medium for presenting this information

Step 2A- Framework for presentation slides

1. Title- "The benefits of autopay"

    "Improving customer loyalty through autopay"

    "Autopay reduces customer churn"

2. Agenda-   The current situation (churn), the problem areas, the remedy
3. Executive Summary-   Autopay reduces customers likelihood of churning
4. Overview of dataset-   Describe the features that I started with, and those that I am focusing on
5. Visualization-   Heatmap to narrow our list of features, then further analysis with bar/tree graphs
6. Recommendation- Incentivise autopay for customers (discounts, online features, etc)
7. Visualization of changes if recomendation is followed-   How many churns would be prevented if the non-autopay had the same churn rate as autopay customers
    a.   Overlapping bar graphs with autopay on bottom, and not-autopay on top.
8. Conclusion- Benefits of autopay, other potential churn drivers that should be examined
9. Appendix-   Figures for questions that I may be asked, but would go beyond 3 minute time-limit
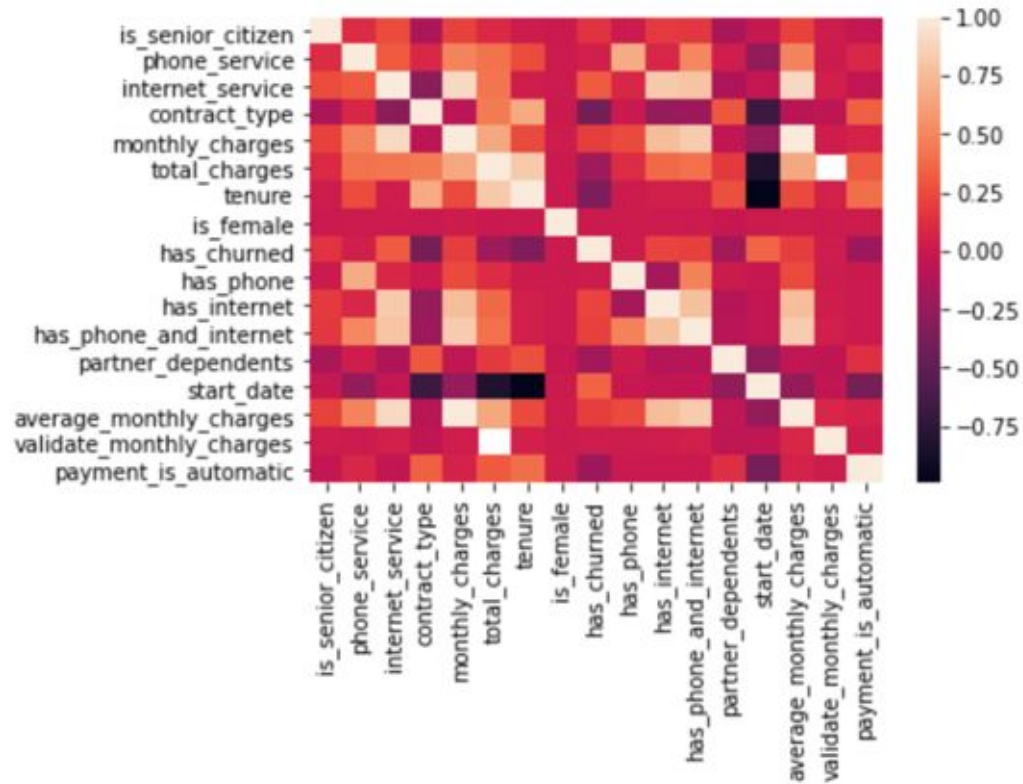
Chart 1

1- Prepare to create:

Heatmap showing correlation of other features to churn.

2- Talk and listen:

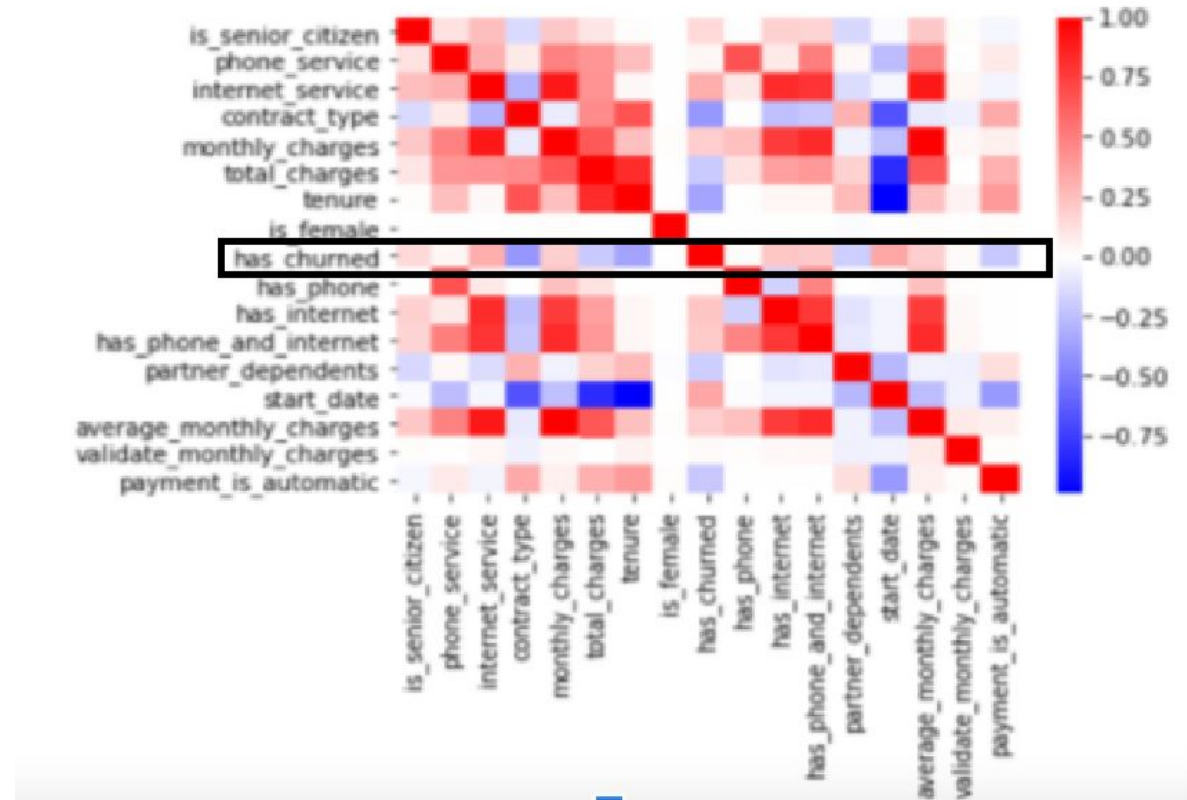I need to identify important drivers of churn so that we narrow our focus.

Make the problem more simple and easy to understand.

Chart 1 part 3- Sketch

Chart 1 part 4- Prototype

Remove similar derived
fields like has_internet (we
already have internet_type)

Chart 2

1- Prepare to create:

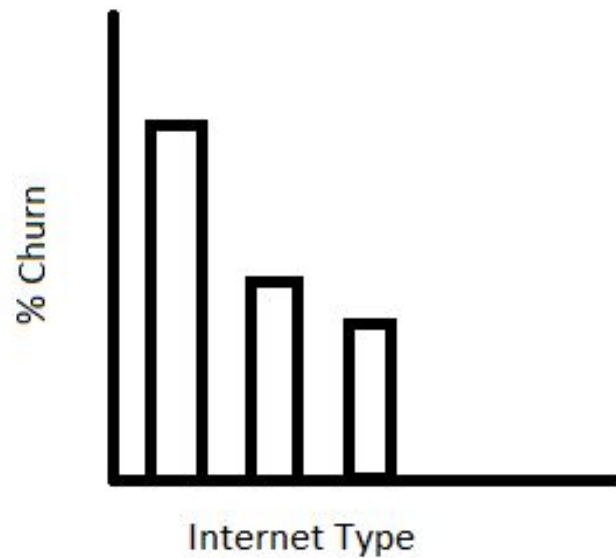Graphs showing the type of internet service has a large impact on churn.

2- Talk and listen:

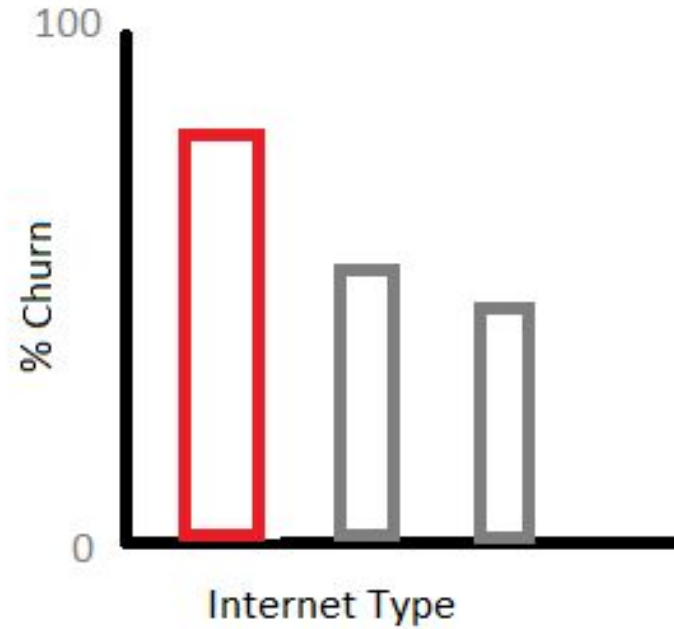I need a simple, clear chart showing the impact of service type.

Audience should understand in glance without me needing to explain it.

Chart 2 part 3- Sketch

Chart 2 part 4- Prototype
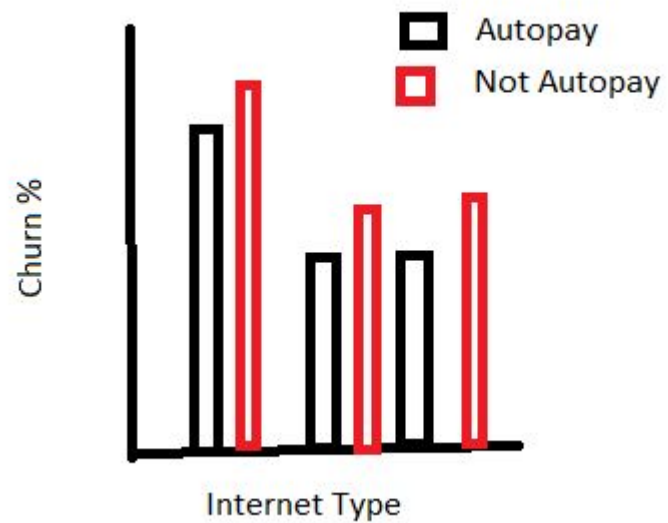
Chart 3

1- Prepare to create:

Chart showing effects of autopay on churn of each internet service type.

2- Talk and listen:

Should make the impact of autopay noticeable at a glance.

Show that autopay is most important for fiber optic, but still important for other internet types.

Chart 3 part 3- Sketch

Chart 3 part 4- Prototype