Final Exam- CDA 500

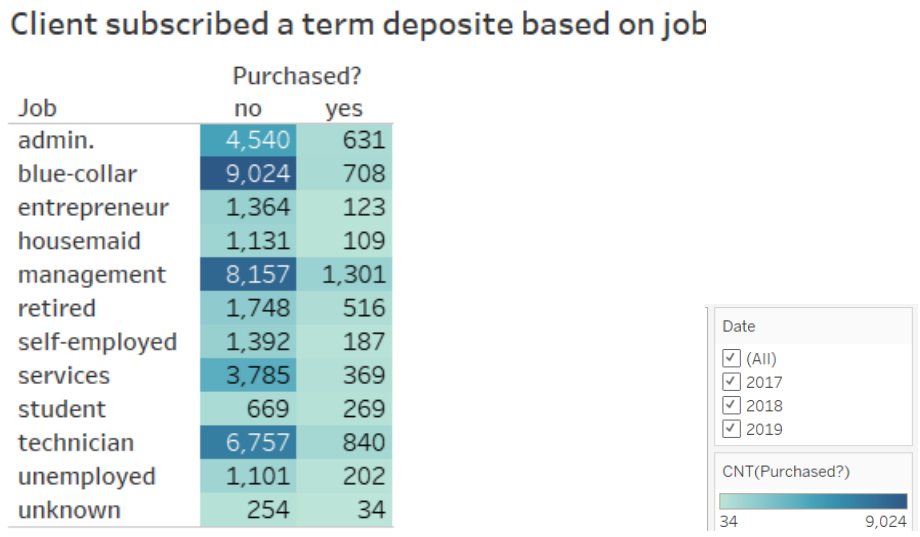
Building your own Data-Driven Story

1. A minimum of five visuals of your choosing, built with Tableau.

a. For each visual, you must provide a screenshot of the visual and a 6-8 sentence description of the visual. 1-2 sentences must tell the story of the visual as though you are communicating it to your target audience. The remainder of the write up must be devoted to describing how your visual utilizes the design methodologies and audience considerations we discussed in class (such as the Gestalt principles).

b. Note: While more than one visual can be of the same type (e.g., line chart), you must have at least three different chart types across the five required visuals. You are welcome to build more visuals if you find benefit in doing so.

Visual 1



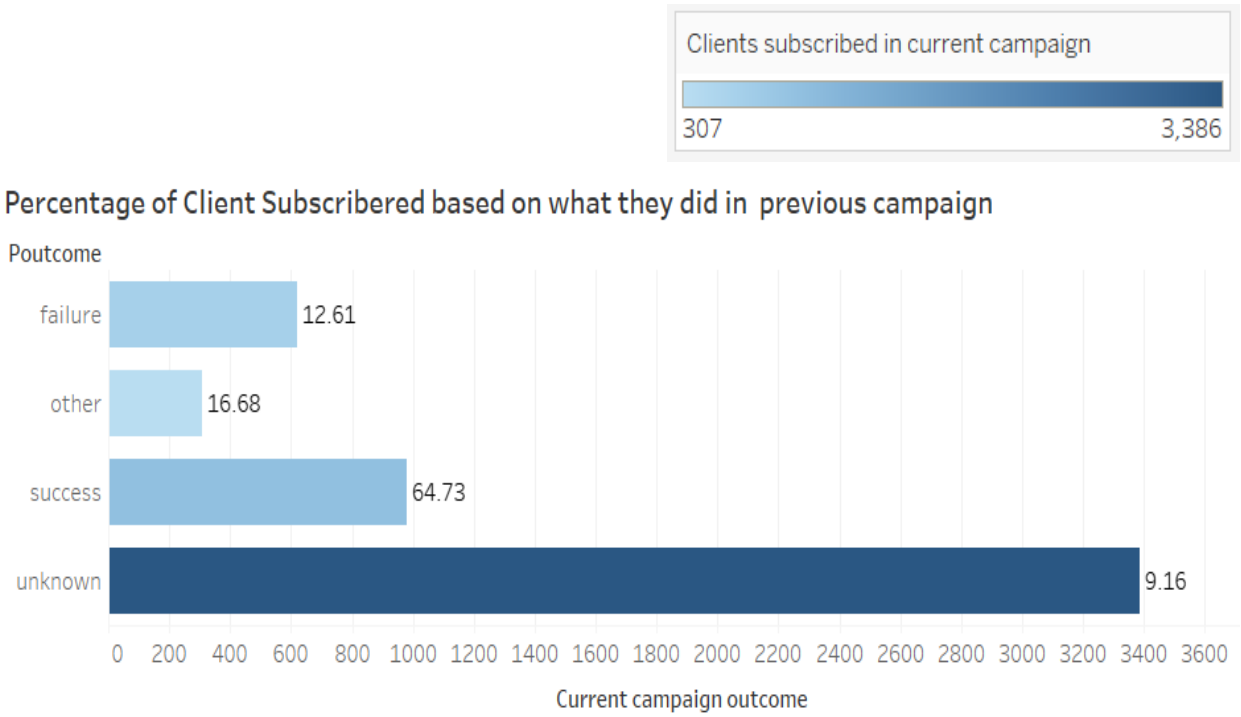
Story:

The visual is a table describing the purchase that is client subscribing to term deposit. The table shows statistics of purchases for different jobs. We can see that the clients having management jobs are subscribing the most and clients with blue-collar jobs are subscribing the least.

Design methodologies and audience considerations:

The table is a simple way of showing the figures and color shades are telling the values of purchase made or not. Dark blue to light green is the color spectrum. There is a filter on date, the audience can select it to interact with the visual. The filter is on Year, and it is a simple way of interacting with the visual. This visual shows simplicity to tell the information about the impact of job of clients on the purchase made. The Audience is board members who can filter on year to interact with the visual. The information of outcome of contacting the clients is an important insight of current campaign.

Visual 2



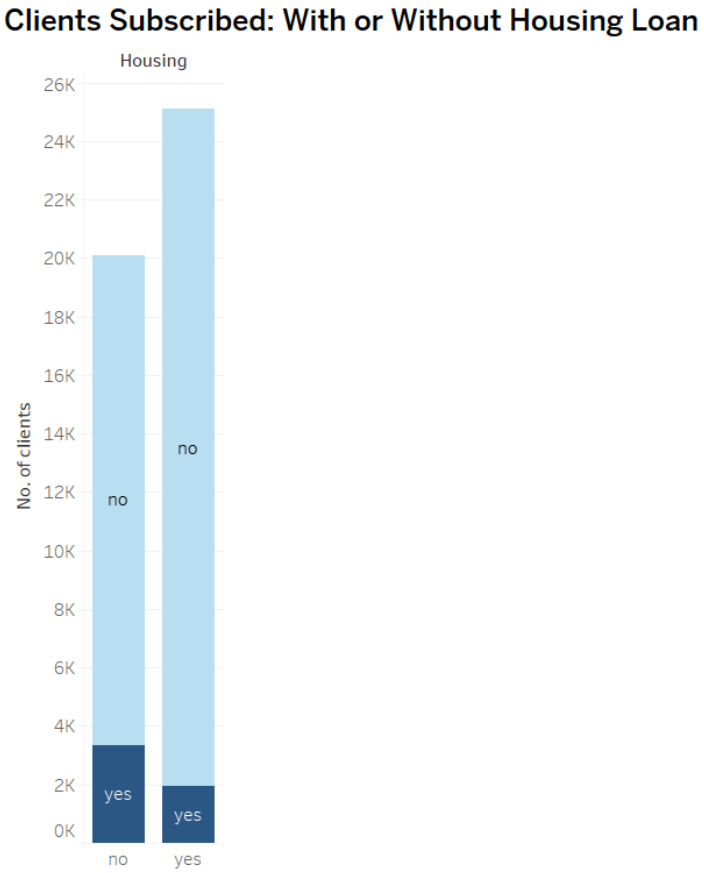
Story:

The chart bar length shows the number of clients in previous campaign and the label at the end is the percentage of clients who subscribed to the current campaign based on what they did in previous campaign. It seems that contacting the clients who subscribed to the previous campaign will be a successful option.

Design methodologies and audience considerations:

The chart has only shades of blue, light blue means less clients subscribed, and dark shade of blue means more clients subscribed. The legend is also telling about the shades of blue telling the number of clients in the campaign. The label is used to tell the percentage of people subscribed to the current campaign based on what they did in previous campaign. The audience, which is board members would like to see how clients acted in current campaign based on how they acted in previous campaign.

Visual 3



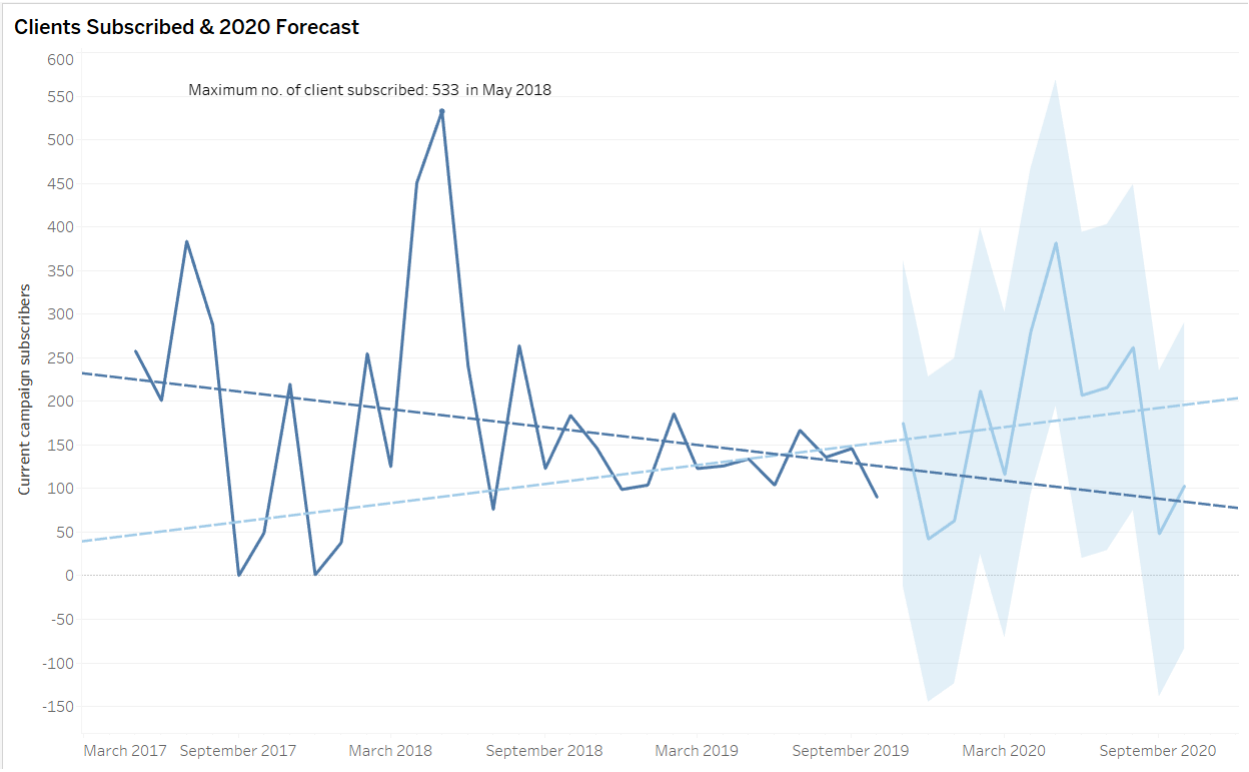
Story:

The chart shows clients subscribing to term deposit based on if they have a housing loan. For the year 2017-2019, the clients without a housing loan are subscribing to term deposit more than they with a housing loan.

Design methodologies and audience considerations:

The shade of blue is used which is neutral for telling if the client subscribed to the current campaign or not. The yes and no labels are written in the middle of the bar which will be easier for the audience to know about the data. The vertical axis is edited to a more understandable name. The legend for color code is not needed as bars are labeled as this will have less clutter in the presentation. The Audience is Board members and the information of if the housing loan is affecting the client subscribing to term deposit. As housing loans can be a big investment so it is a important information to be considered for the current campaign.

Visual 4



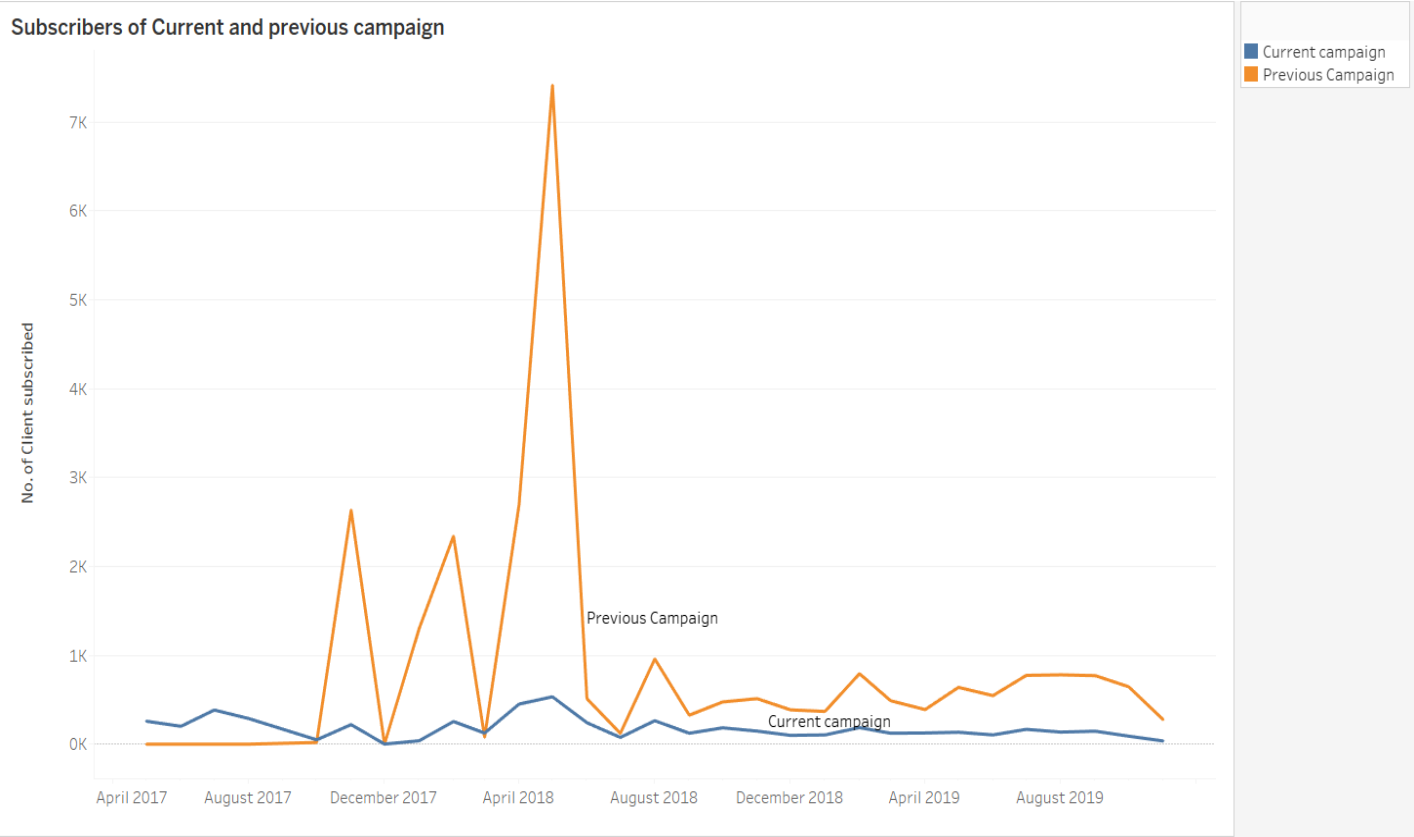
Story:

The chart shows the number of clients subscribed to the current campaign from year 2017- 2019 and then forecast data for 2020. The trend of line with original data is negative but the trend after forecasting data is positive.

Design methodologies and audience considerations:

The color of the line is blue which is neutral color. The axis of date is hidden as it is clear it is a date axis as it has label of month year. The maximum point and its date are labeled, which is a significant point in the graph. The vertical axis label and title of chart is simple and will make audience to better understand what line chart is saying. The line chart is a simple way of conveying performance and forecast of the current campaign to board members. It is important data to be conveyed to board members as the presentation is about potential client subscription for the current campaign.

Visual 5



Story:

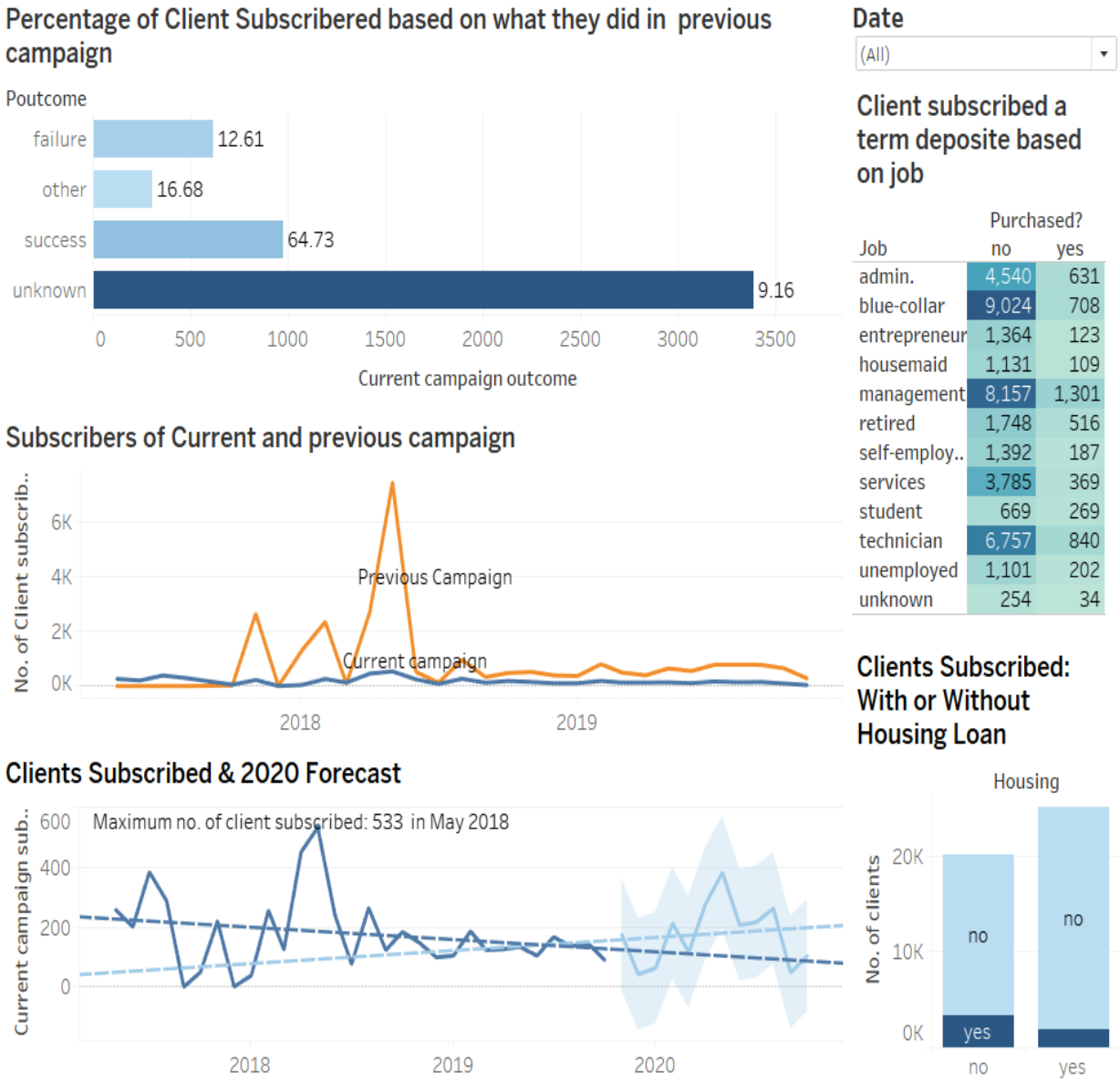
The chart shows the number of clients subscribed to the current campaign and previous campaign from year 2017- 2019. It looks like there is a big decrease in the number of clients subscribed to the current campaign compared to the previous campaign.

Design methodologies and audience considerations:

The time axis is removed by reading date as Month Year, audience can understand axis is date. Orange and blue are used for differentiating lines of the previous and current campaign. Label and color legend is used to denote the lines and it will be easier for the audience to not get confused. The title and vertical axis are labeled which makes the information in the graphs easier to understand. The board members as audience can get a measure of current campaign performance through the simple line chart. Dual axis is not used in the chart to have less confusion about the measures and so 2 lines are used with common axis.

2. A dashboard, which combines visuals together to communicate your insights to your audience— there is no minimum number of visuals for this dashboard (though, you should leverage from the five above to make your journey simpler).

a. You must provide a screenshot of your dashboard, along with a 6-8 sentence description of the dashboard: 1-2 sentences to tell the story and the remainder discussing how your dashboard utilizes the dashboard design concepts discussed in class.



Story:

The dashboard displays information regarding the potential for client subscriptions for the current campaign for year 2017-2019. The information can also be filtered for different years.

Design methodologies and audience considerations:

The insight I am communicating here is potential for client subscription for current campaign for years 2017-2019. The 3 visuals talk about the potential clients based on job, housing loan and what they did in previous campaigns. One line chart shows the past current campaign data and forecast for one year. The trend line is given so that the audience can observe the trend before the forecast and after. The other line chart shows the current and previous campaign comparison. The dashboard is interactive with a filter, where audience can choose different years from 2017-2019. All the visuals are present in the proper space and using neutral colors. The axis name is hidden where the information is obvious.

3. An additional 1-page double spaced write up about your process in developing visuals, issues you encountered, insights you were able to derive, and your chosen audience persona. This can include any details you feel appropriate about your journey through the dataset.

The process in developing visuals started by deciding the audience and what information I need to convey. I wanted to convey the potential for client subscriptions for the current campaign for year 2017-2019. The visuals are simple and focus in potential client subscription for the current campaign. The visuals should present information about the outcome of the current campaign. The information of campaign outcomes and forecast of one year can be shown for the time interval it ran (2017-2019). The campaign can be compared to the previous campaign to compare the trends at different times and a general idea of subscriber's difference. The information of potential clients can be conveyed like which job client is likely to subscribe and if the housing loan affects the client subscription. The previous campaign client data of who subscribed or not and how many of they are subscribing in the current campaign can be a useful information to see potential client.

Issues encountered while presenting the current campaign outcome for each client was that the outcome of purchase, I need was not a measure value and plotting chart with no measure value was tough. I created two columns, the first column as "outcome" which has Boolean data, and the value is 1 if client subscribed and 0 otherwise. The other column "not buy" has a value of 0 when client subscribed and 1 otherwise.

Insights derived are that the client subscription success in the current campaign is way less than the previous campaign but has a similar trend for many intervals. And the people with no housing loan and one client who subscribed in previous campaign are more likely to subscribe in current campaign to term deposit. And chances of client subscribing to term deposit after contacting them based on their job.

Chosen audience persona is the board members of the company are kept in mind while creating dashboard and visuals. The members are CEO (Chief Executive officer), CFO (Chief Financial officer), Vice President and Regional manager of the company. The members are busy, have competing priorities and so presented with simple visual presentation with insights based on client base and performance of current campaign.