Lab1 Ex2 Memo

Team Awesome - Sayem Lincoln, Joshua Schwimmer, John Townshend.

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plot4
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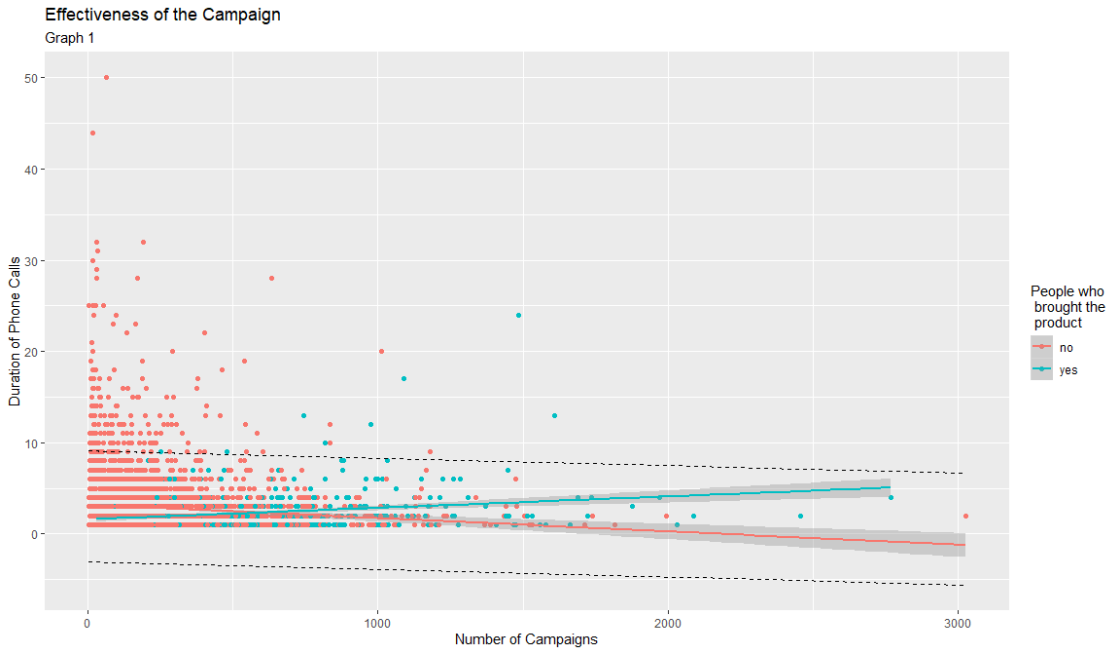

The above graph (Graph 4) shows the effectiveness of the campaign. The graph illustrates duration of the phone calls against the number of campaigns and shows us whether that campaign was successsful or not - this is shown by the number of people who bought the product and the people who did not (color coding represented on the left side of Graph 4).

And then we constructed a linear model from the given data, the linear model is showcased by the slightly curved lines which is our linear model's regression line. The grey area known as the confidence bands that covers both lines are the confidence intervals for each regrression line.

Then the dashed black lines known as the prediction bands represents the 95% prediction intervals, again for both types of data, so the prediction interval here gives us a prediction with a 95% probability that a future observation will be contained within the prediction interval. Conversely, there is also a 5% probability that the next observation will not be contained within the interval.

So, for a future capaign where the bank might offer a similar product, the bank should target and focus on conducting the campaign within the 95% prediction bands, as being

within this range offers the bank the best probable outcome. By doing this, the bank can maximixe its utilities and the campaign can be more productive.

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plot5
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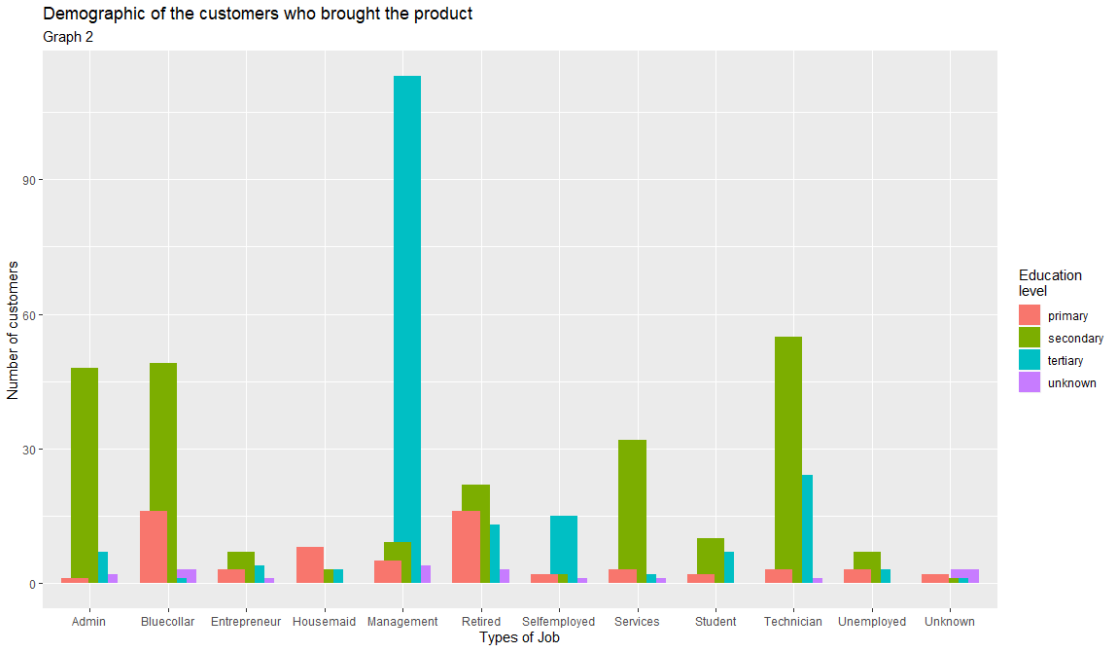

The above graph (Graph 5) illustrates the demographic of the customers who brought the product from this campaign, we displayed the customer's information and background by their types of job and by the level of education they had. So, for a future campaign the bank should target certain types of people who are buyers of this type of product so that they can again sell it to these type of customers and get the highest amount of sells and maximize their productivity.