Course 3 Capstone

Data Collection

Finding the Middle

Mean, Median, and Mode help you compare data. Below, list the mean, median, and mode of the clicks in the provided data.

Mean: 60.38

Median: 60.00

Mode: 78.00

Finding the Middle

Mean, Median, and Mode help you compare data. Below, list the mean, median, and mode of the clicks in the provided data.

Mean: 5.98

Median: 6.00

Mode: 5.00

Standard Deviation

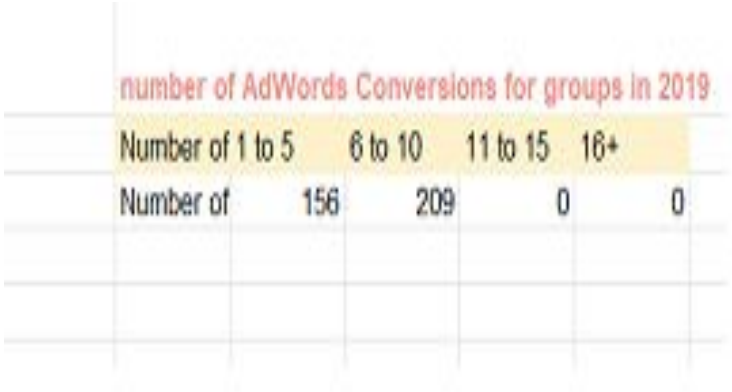
Determining variance in data helps you understand your risk and better target your audience. Below, enter the standard deviation of the provided data.

Standard Deviation of Clicks: 14.37

Standard Deviation of Conversions: 1.63

Frequency and Contingency Tables

Understanding how often something happens is important to understanding trends and patterns in your data. Create and insert a contingency table generated from your data.



number of AdWords Conversions for groups in 2019

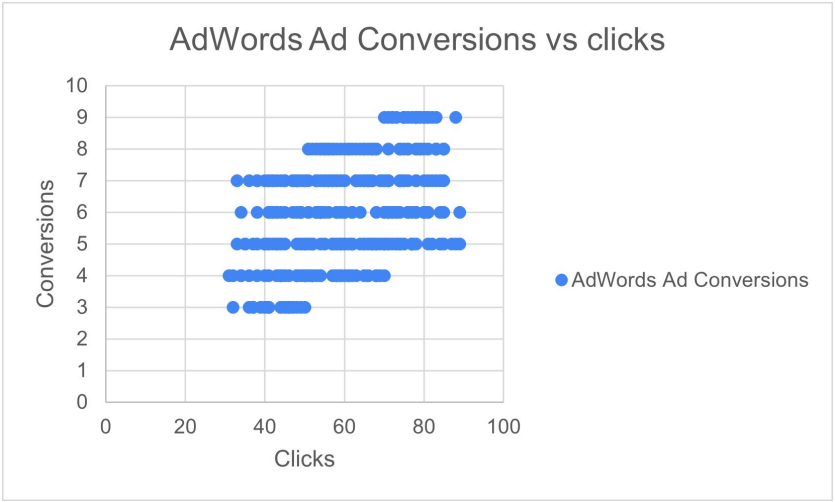
Number of	1 to 5	6 to 10	11 to 15	16+
Number of	156	209	0	0

Scatter Plot

Understanding the relationships between data is important to understanding trends and patterns. Create and insert a scatter plot generated from your data. Then, include the input the correlation coefficient as well.

Scatter Plot of your data:

Correlation coefficient: 0.45

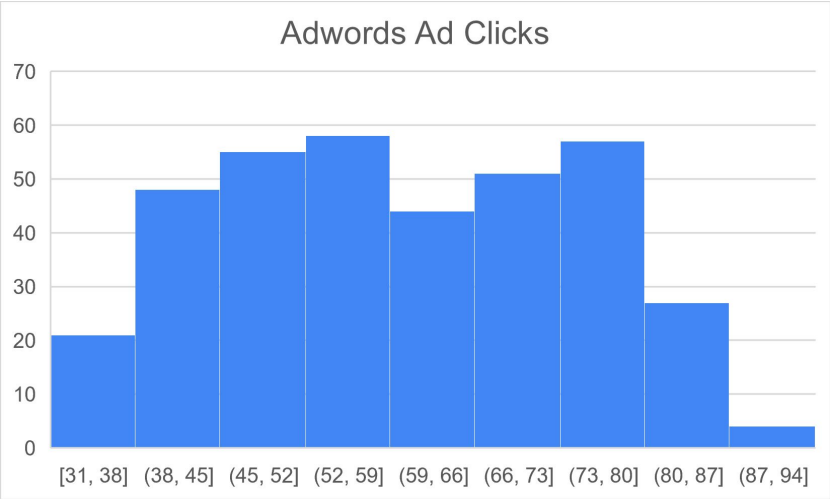


End of Section 1

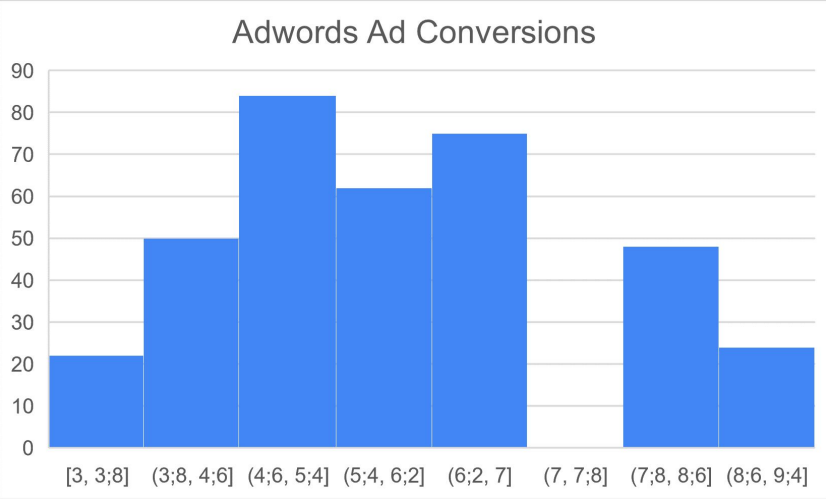
Sample Type

It's important to understand the sample you're using in your analysis. Fill in the information below about the sample you have received:

Histogram of your clicks data:



Histogram of conversions data:



Sample Type

It’s important to understand the sample you’re using in your analysis. Fill in the information below about the sample you have received:

Does the clicks data have a normal distribution? Yes

Does the conversions data have a normal distribution? Yes

Variable Types

Determining the types of variables your working with is an important skill. Below, list the variables from your data that are:

Quantitative:

Continuous: AdWords Ad Views, AdWords Ad Clicks, AdWords Ad Conversions,

Discrete: Cost per AdWords ad, AdWords Click-Through Rate, Adwords conversion rate, Adwords cost per click

Qualitative:

Nominal: xx

Ordinal: xx

End of Section 2

Question and Hypothesis

The question you hope to answer and your hypothesized answer are necessary to complete an analysis. Answer the following questions

What is your hypothesis based off the evaluation question? The number of conversions increases on the Facebook platform.

Question and Hypothesis

The question you hope to answer and your hypothesized answer are necessary to complete an analysis. Answer the following questions

What is your independent variable? Facebook Ad Conversions, Adwords ad conversions

What is your dependent variable? Facebook Ad Clicks, AdWords ad Clicks

Running a Test

With your question and hypothesis ready, run the test on the two sets of data. Fill in the information below.

Mean number of Facebook conversions: 11.74

Mean number of Adware conversions: 5;98

p-Value: 0.0004

Hypothesis

After running the test, was your hypothesis proven correct?

Do your findings support a null or an alternative hypothesis? xx

What's your conclusion about your main hypothesis? Is there a difference, and is it what your hypothesis predicted?

Yes, as the p-value is very less than alpha, my hypothesis that Facebook ad conversions are more than that of the AdWords ad conversions.

End of Section 3

Determining a Model

Based off what you know so far, you'll need to determine if your data meets the assumptions for a chosen model. Including:

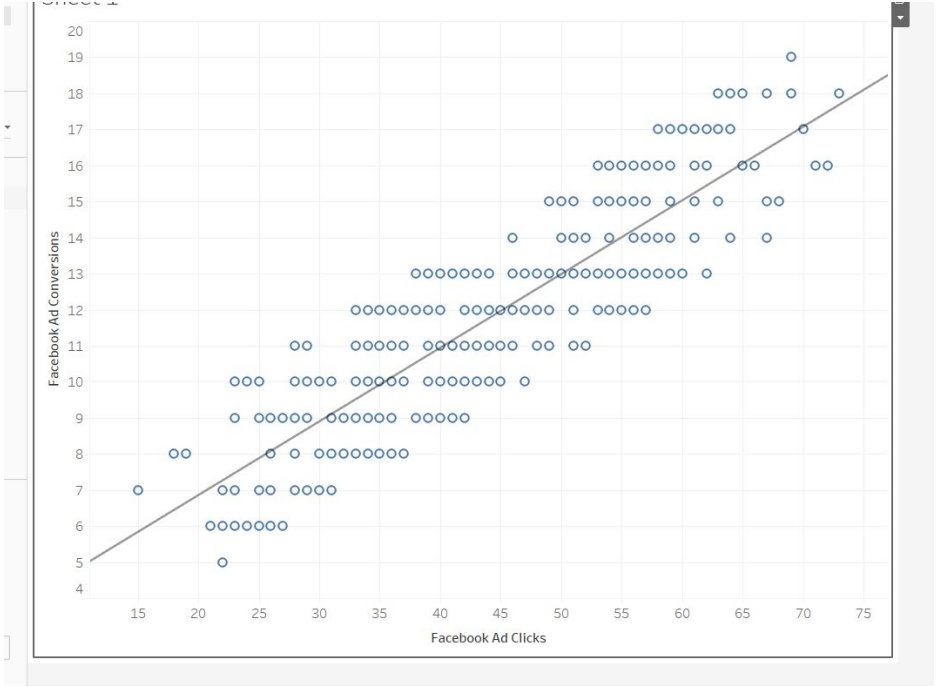
Which model makes the most sense to use and why?

Here what we will measure is

- Independent variable: number of Facebook ad clicks, dependent variable: Facebook ad conversion numbers
- purpose: predict the dependent var using the independent var.
- so we will use Simple Linear Regression

Modeling

Finally, include a visualization of your complete model.



End of Section 4

Final Insights

Now, knowing what you do about the results of your test, what are the final insights that you would share with your client? What did you learn and what would you recommend? Is there anything you would do differently next time?

Enter your insights here: So based on the results, I would share to invest more on Facebook Ads because the conversions are more. I learnt that with more ad campaigns on facebook, the company would get more conversions from the clicks. Maybe, just look carefully on the content of the Ad banner, the more catchy it is, the more click-ability it will gain, and hence conversions.