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 conversions in the provided data.

Mean: 5.98

Median: 6.00

Mode: 5.00

Standard Deviation

Determining variance in data helps you [why this is helpful]. 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.

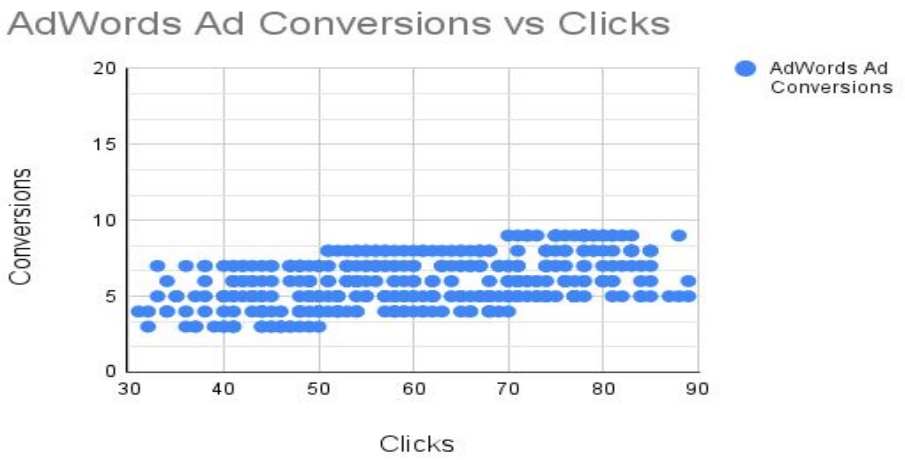
	Number AdWords conversions by Grouping for 2019			
Number of Conversions:	1 to 5	6 to 10	11 to 15	16+
Number of Occurences:	156	209	0	0

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.

Correlation coefficient: 0.45

Scatter Plot of your data:

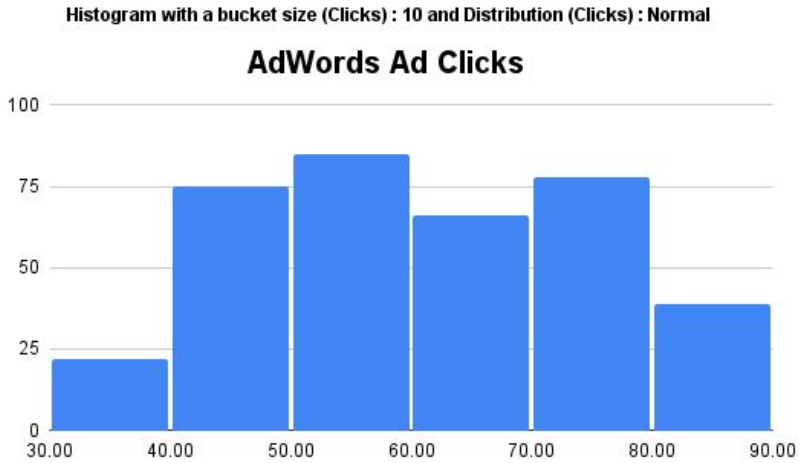


End of Section 1

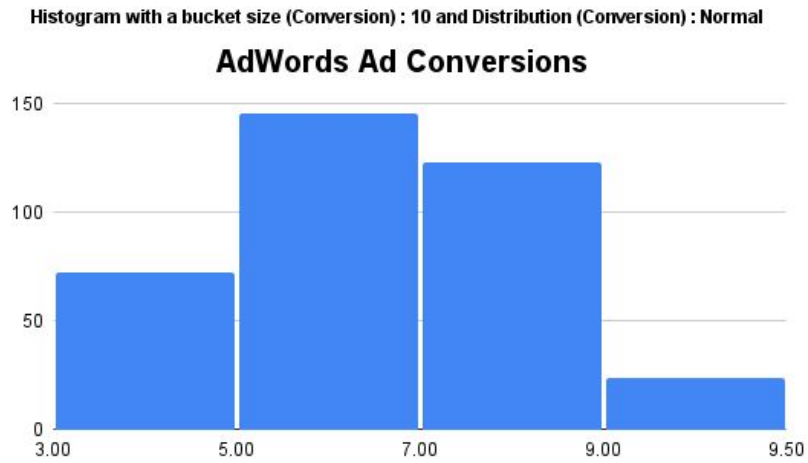
Sample Type

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,the clicks data have a normal distribution

Does the conversions data have a normal distribution?

yes,the conversions data have a normal distribution

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 Click-Through Rate,
AdWords Conversion Rate,
AdWords Cost per Click

Discrete: AdWords Ad Views,
AdWords Ad Clicks,
AdWords Ad Conversions,
Cost per AdWords Ad.

Qualitative:

Nominal: –

Ordinal: –

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?

My hypothesis based off the evaluation question is “there will be definitely a significant difference between the number of conversions on the Facebook platform versus the AdWords platform”

Three Parts of a Clear Hypothesis:

What will change? - Conversions

How will it change? - It will increase

What will cause the change? - Campaigning ad in 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?

The ad being campaigned in Facebook

What is your dependent variable?

Increase in number of conversions

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

Hypothesis

After running the test, was your hypothesis proven correct?

Yes my hypothesis was proven correct after running the test

Do your findings support a null or an alternative hypothesis?

My findings support **"**Alternative Hypothesis"

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

My conclusion about main hypothesis is "there is a difference between Facebook ad conversions and AdWords ad conversions" there is a increase in number of conversions in Facebook platform. This is what my hypothesis predicted.

End of Section 3

Determining a Model

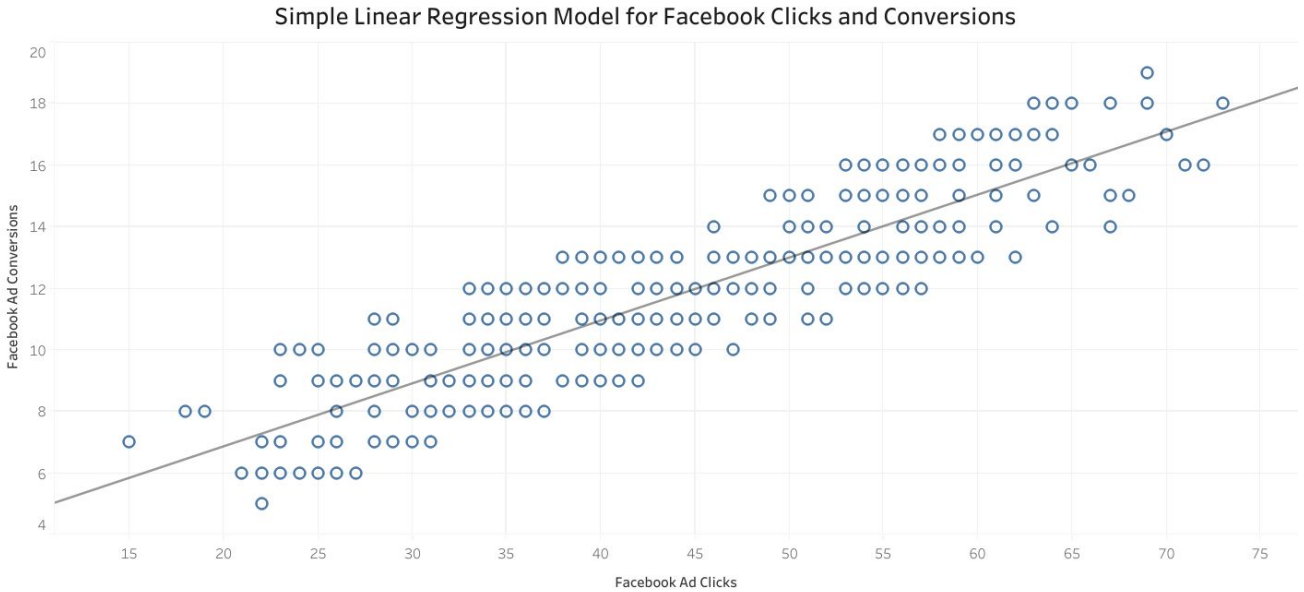
Based off what you know so far, you'll need to determine if your data meets the assumptions for a chosen model. Including:

Which model makes the most sense to use and why?

Simple linear regression model makes the most sense to use because both the independent variable and dependent variable are quantitative and we are predicting the dependent variable using independent variable.

Modeling

Finally, include a visualization of your complete model.



Using chart,Simple linear regression model shows to be the *expected number of Facebook Ad Conversions* for a day of *50 Facebook Clicks* is **“13”**.

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?

The results of my test proves that the number of conversions will increase if we campaign ad in Facebook platform. There will be higher chances of conversions in facebook compare to AdWords. So, my recommendation is to campaign ad in Facebook platform to achieve more number of conversions rather than AdWords. The thing I would do differently next time is spending large amount of ad campaigning budget in Facebook.