

# Reminders...

- You will use this file for the entirety of this course. Save it in a place where you can easily access it over the upcoming modules.
  - You can edit and save this document in Google Drive
  - If you download this document, keep it in a place you can find it later
- The content you put into this document will be used for later lessons
  - Do not skip any capstone activities in any of the lessons
  - Update this document at the end of each module and start with Module 1

# Course 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

Mode: 78

# 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

Mode: 5

# 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.

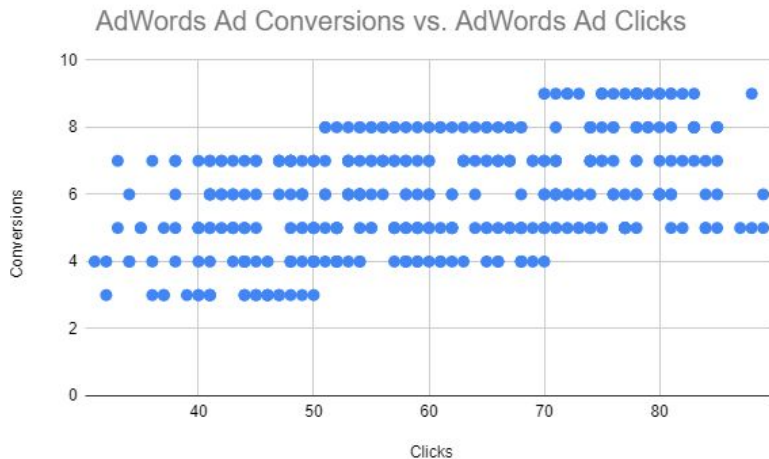
Number of AdWorks Conversions Grouping for 2023			
6-	6 to 10	11 to 15	15+
156	209	0	0

# 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 Module 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:

[Placeholder, replace this image](#)

- CMD+Click or Right Click and select "Replace Image"
- Then, select the visualization, graph, etc. that you want to include

Histogram of conversions data:

[Placeholder, replace this image](#)

- CMD+Click or Right Click and select "Replace Image"
- Then, select the visualization, graph, etc. that you want to include

# Module 2: 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? xx

Does the conversions data have a normal distribution? xx

# 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: xx

Discrete: xx

Qualitative:

Nominal: xx

Ordinal: xx

# End of Module 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? xx

# 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? xx

What is your dependent variable? xx

# 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: xx

Mean number of Adware conversions: xx

p-Value: xx

# 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?



# End of Module 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?

# Modeling

Finally, include a visualization of your complete model.

Placeholder, replace this image

- CMD+Click or Right Click and select "Replace Image"
- Then, select the visualization, graph, etc. that you want to include

# End of Module 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: