“Using Data and Applying Knowledge to Make decisions.”

SCHA Knowledge Academy
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Objectives

• Learn the steps of data driven decisions.
• Learn how to de-mystify data for others.
• Learn how to tell a story with data.
• Learn how to use data to set goals.
Steps for making data driven decisions

1. Make sure you have a good understanding of the business problem – What is the question you are trying to answer?
Steps for making data driven decisions

2. Choose the right metrics.
   – Good vs. Bad metrics
     • Relevant to the question you are asking,
     • Easy to collect
     • Repeatable measurement
Steps for making data driven decisions

3. Become the expert of the data...

Have the answers to:

- What is the source of your data?
- How well does the sample data represent the population?
- Does your data include outliers? How did they affect the results?
- What assumptions are behind your analysis?
Steps for making data driven decisions

4. Analyze the data and pull together your insights.

Understand correlation vs. causation.
Steps for making data driven decisions

5. Make recommendations on direction &
tell the story with your data.
What Is Data?

Simply put,

Data is information.

An example:

We are going to buy a cake for an office party so we ask what type of cake do people like. 5 say chocolate, 3 say vanilla and 1 says carrot.

This information is called **DATA**.
We Use Graphs to Organize Data.

Cake Preference

- Chocolate
- Vanilla
- Carrot
Most Common Statistics Used

- Mean
- Median
- Standard Deviation
- Variance
Know the limitations of statistics.
Ever feel like this......

https://www.youtube.com/watch?v=t8XMeocLflc
"How to Tell a Story with Data“

1 - Find the compelling narrative.

Along with giving an account of the facts and establishing the connections between them, don’t be boring.
"How to Tell a Story with Data"

2 - Think about your audience.

What does the audience know about the topic?

Are they.....

• A Novice
• A Generalist
• A Managerial
• An Expert
• An Executive
3 - Be objective and offer balance.

A visualization should be devoid of bias.

Even if you are trying to influence the audience, decisions should be based upon what the data says—not what you want it to say.
We have seen huge growth! Right?
"How to Tell a Story with Data“

4 - Don’t Censor.

Don’t be selective about the data you include or exclude
5 - Finally, Edit, Edit, Edit.

If you spend more time editing than creating you are probably doing something right.
We use data to set goals and measure progress.
## SMART goals

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<tbody>
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<td><strong>S</strong></td>
<td>Specific</td>
<td>Measurable</td>
<td>Attainable</td>
<td>Relevant</td>
<td>Time Bound</td>
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<td>What specifically is it that you want to achieve?</td>
<td>How will you know you achieved it? Do you have a baseline?</td>
<td>Do you have the power to accomplish it?</td>
<td>Can you realistically achieve it?</td>
<td>When exactly do you want to have it done by?</td>
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Example of a personal goal

I want to be healthier.

Is this a SMART goal?

Why not?

Is it specific?

Is it measurable?

Is it attainable?

Is it relevant?

Is it time bound?
Let’s make this SMART

• Specific
  – Lose 10 pounds

• Measurable
  – Use bathroom scale to monitor weight

• Attainable
  – Yes, through diet and exercise

• Relevant
  – Yes, this would put me at a healthier weight

• Time bound
  – Within 90 days
New SMART goal

I will lose 10 pounds from my current weight on Oct. 22 as measured by my bathroom scale by Jan. 22.
Chris’ Pizza Barn Exercise