# Practical Application

o **Refer to the critical metric (output Y) and at least 5 factors (input X's) you identified in a previous lesson for applying to this hypothesis testing.**

- For any factor that is a percentage value, try applying the 2 Proportions Test.
  - To do this, you'll need to compare at least two different sets of that same factor (e.g., across multiple periods of time, or by different locations, or by different groups, etc.).
  - Other factors in your organization can be used for this exercise.
- Before running the 2 Proportions Test, do the factors appear to be different?
- After running the 2 Proportions Test, are the factors statistically different?
- If the answers to the above 2 questions are different, then how does that affect how you'd typically measure and communicate that in the organization?
  - For example, does the difference between the factors affect financial decisions (e.g., how people are compensated), or process changes (e.g., how the process may be modified), or other critical actions?
  - If so, then how should the results from this 2 Proportions Test be used to influence your organization?
    - *Should they change how the factors are compared (e.g., across different times, locations, groups, etc.)?*
    - *Should they change how the factor is measured?*
    - *Should they change how they react when they compare the metric this way?*

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