

# Practical Application

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- **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 continuous value, try applying both the 1 Sample Sign and 1 Sample Wilcoxon tests.
    - To do this, you'll need to compare that factor with a goal for that factor typically set by the organization.
    - These non-parametric tests are ideal for non-normal distributions, but you can still run them even if your continuous value has a normal distribution.
    - Other factors in your organization can be used for this exercise.
  - Before running either 1 Sample Test, does the factor meet or exceed the goal?
  - After running either 1 Sample Test, does the factor statistically meet or exceed the goal?
  - If the answers to the above 2 questions are different, then how does that affect how you'd typically measure and communicate that factor in the organization?
    - For example, does that factor meeting or not meeting the goal 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 1 Sample Test be used to influence your organization?
      - *Should they change how the goals are set?*
      - *Should they change how the factor is measured?*
      - *Should they change how they react when they compare the metric to the goal?*