**1. Project Title and Objective**

**Example:**

**Title**: "Optimizing Job Search Click Rate with A/B Testing"

* **Objective**: We aimed to improve user engagement by adding a "Job in My Network" filter to the LinkedIn job search interface. Our hypothesis was that this would increase the click rate on the "Easy Apply" button by 5%.

**2. Experiment Design**

* **Hypothesis**: Adding a "Job in My Network" filter will increase the click rate on the "Easy Apply" button by 5%.
* **Groups**:
  + **Control Group**: Users see the current set of job filters (no "Job in My Network" filter).
  + **Variant Group**: Users see the additional "Job in My Network" filter.
* **Sample Size**: 13,000 users per group.
* **Duration**: 2 weeks (or a specified duration for data collection).

**3. Key Metrics and Results**

* **Key Metric**: Click-through rate (CTR) on the "Easy Apply" button.
* **Results**: The click rates for both groups were:
  + **Control Group**: 10% click rate
  + **Variant Group**: 15% click rate
* **Statistical Significance**:
  + Z-test: p-value = **0.0** (Highly significant)
  + Chi-square test: p-value = **0.0** (Also highly significant)

**4. Statistical Analysis**

* **Z-Test for Proportions**: We found that the difference in click rates between the control and variant groups was statistically significant, with a **p-value of 0.0** (indicating that the chance of this result occurring by random chance is virtually zero).
* **Chi-Square Test**: The Chi-square test also confirmed that the distribution of clicks between the two groups was significantly different, with a very small p-value.

**5. Visualizations**

Visuals are key to presenting your results clearly. Here are a couple of visualizations you can include:

1. **Bar Chart** comparing the click rates between the control and variant groups.
2. **Confidence Interval Plot** for the click rates of both groups to show the range of possible values.



