# Project Design Writeup and Approval Template

Follow this as a guide to completing the project design writeup. The questions for each section are merely there to suggest what the baseline should cover; be sure to use detail as it will make the project much easier to approach as the class moves on.

**### Project Problem and Hypothesis**

I think there are many questions that could be addressed by this data. Some examples:

1. Classifying respondents as users of specific methods of entertainment consumption based on variables such as
   * demographics,
   * usage levels of other methods of consumption,
   * ownership of hardware
2. Predicting choice of method based on circumstances of the occasion, such as:
   * Group or solo watching (including who is in group)
   * Day of Week/ Time of day
   * Location
   * Other factors
3. Predicting cable cord cutting based on variables such as
   * demographics,
   * usage levels of other methods of consumption,
   * ownership of hardware
4. Predicting usage levels based on variables such as
   * demographics,
   * usage levels of other methods of consumption,
   * ownership of hardware

These are classification problems, except for #4.

Having a clearer understanding of what motivates consumers to pick a certain method or to be heavy or light users would inform choices in advertising messages or media.

Conventional wisdom is pretty convinced that demographics are the most important driver of entertainment consumption. I'm hoping to find that something else is important.

**### Datasets**

Survey data collected via online interviews conducted against a general population sample from a panel provider. 2364 interviews among general pop sample of Americans 12-74, with an augment of 340 respondents to fill out key usage segments (e.g., streamers, digital content buyers, etc.)

Excel file with details of the questionnaire (Still working on it)

**### Domain knowledge**

I have 20 years of experience with survey research in the entertainment space, with 6 years specifically working with home entertainment issues. My experience with the category will give me a better sense of when results "make sense" or not. Our prior analysis of this data was very basic. We didn't try to find any relationships within the data.

I know that data science is being used for entertainment but it tends to be done within a company and results are not shared publicly.

**### Project Concerns**

\* What questions do you have about your project? What are you not sure you quite yet understand? (The more honest you are about this, the easier your instructors can help).

\* What are the assumptions and caveats to the problem?

\* What data do you not have access to but wish you had?

\* What is already implied about the observations in your data set? For example, if your primary data set is twitter data, it may not be representative of the whole sample (say, predicting who would win an election)

\* What are the risks to the project?

\* What's the cost of your model being wrong? (What's the benefit of your model being right?)

\* Is any of the data incorrect? Could it be incorrect?

### Outcomes

\* What do you expect the output to look like?

\* What does your target audience expect the output to look like?

\* What gain do you expect from your most important feature on its own?

\* How complicated does your model have to be?

\* How successful does your project have to be in order to be considered a "success"?

\* What will you do if the project is a bust (this happens! but it shouldn't here)?