**Capstone Project Proposal**

**Problem statement formation**

How does increased internet connectivity affect energy consumption? Can we predict a country’s energy consumption based on internet connectivity?

**Context**

Over the last several decades the world has seen an incredible increase in energy usage and internet connectivity. As more and more people enter this digital landscape the demand for energy will only increase. It would be extremely useful to be able to predict how energy usage will increase in the future as the world becomes more connected.

**Criteria for Success**

Accurate prediction of energy usage for countries around the world.

**Scope of Solution Space**

For this project I will be focusing on analyzing various country’s internet connectivity and energy usage over time.

**Constraints**

The complexity of global systems may not be able to be represented by energy usage and internet connectivity alone, it is possible I will need to consider other features to more accurately predict the target feature of energy consumption.

**Stakeholders**

The United Nations and the US Energy Information Administration will provide valuable data to solve this problem. A successful model could be used by government agencies, energy developers, and internet providers to aid in decision making about future development.

**Data Sources**

API to determine the energy production and consumption of various countries over time.

* <https://www.eia.gov/international/data/world>

API to determine the internet connectivity of various countries over time.

* <https://www.quandl.com/data/UICT-United-Nations-Information-and-Communication-Technology/usage/quickstart/api>