

Omair Tariq Capstone Project 1 Proposal

1. Problem

Identify capital expenditure trends across industries and determine which industries have the largest and fastest growing capital expenditures so that a consulting firm can focus on those industries to maximize margins and profits.

2. Client

The client is a manufacturing consulting firms which helped manufacturers achieve their maximum potential by executing their capital expenditure projects. Based on this analysis, the consulting firm will be able to observe cross-industry trends in capital-expenditures. This analysis will enable the consulting firm to decide which industries are spending the most amount of money in capital expenditures and therefore which industries should garner the most attention from the consulting firm.

3. Data

The United States Census Beaurau's Annual Capital Expenditure Survey (ACES) will be utilized. The data is readily available for download on the Census Beaurau's website at

<https://www.census.gov/programs-surveys/aces/data>.

4. Approach

Import and combine data from table 4a of the ACES for years 2008 – 20015 using pandas in python.

Develop a framework such that the 8 tables can be transformed into a meaningful table with little to no manual editing in excel of the downloaded files from the Census Beaurau's website. Utilize Data Wrangling to manipulate the data and transform it into a format that supports the storyline. Utilize inferential statistics to determine the accuracy of the results from Data Wrangling. Visualize the data to present actionable insights using visualization tools.

5. Deliverables

Code, Presentation Recording, Slide Deck.