Expertise that Works

2023 Towson University Data Analytics Competition

SC&H Group – Employee Utilization and Customer Revenue

Background:

SC&H Group is a nationally recognized management consulting, audit, and tax firm serving clients from rapidly growing private sector businesses to Fortune 500 companies with global brands. The firm's strategic practices provide leading-edge thinking and advice that transform our clients' businesses and help them outpace the competition. We embrace the future and help clients prepare, innovate, and evolve their businesses in this complex and highly competitive world. For more than 30 years, SC&H Group has demonstrated its commitment to delivering powerful minds, passionate teams, and proven results on each and every engagement.

At firms like SC&H Group, it is important to measure how well employees are utilized across practices and clients to maximize the profitability of a company. This generally indicates how "healthy" a firm's processes are when interacting with clients and key when making important business decisions and forecasting. Employee utilization is the percentage of an employee's total working hours spent along work that can be billed to a client versus adminstrative tasks. Administrative tasks are considered working hours that are non-billable. An industry standard for utilization rate is around 80%.

In this case, you are provided with data pertaining to employees and client information between 2019 to 2021. Typically this kind of data is proprietary so we have added masking to our client and employee names; we have also added a wholesale weighted alteration to bill rates. Your objective is to analyze the dataset to determine clients with the highest profitability and employee utilization to help SC&H Group drive more opportunities. SC&H Group is looking for you to be very creative in your pitch for other opportunities of revenue. Make sure to support your recommendations with adequate analysis.

The Dataset:

A main source of the data comes from a time keeping application created by Wolters Kluwer, called CCH® ProSystem fx Practice Management. The **primary** dataset, Towson_SCHGROUP_data.csv to be used for this case is comprised of simulated data of client engagements with employee hours in the time keeping system.

There is also a **supplementary** file that defines the variables in the primary dataset. Towson_SCHGROUP_Schema.xlsx has a "Data Dictionary" tab to define each of the variables in the primary dataset.

-Think about how SC&H Group would like to examine operational excellence on profitablity.

-Review and slice employee utilization.

-Review and slice years based on different variables.