

DATA ANALYSIS INTERNSHIP

REPORT ON INTERNSHIP PROJECT

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Internship Role: Data Analyst
Company: Peacock Solar

Abstract:

The need for new sources of energy which are renewable in nature is on a rise today. We as humans have started shifting towards renewable sources of energy for a number of causes. There are many new companies and start-ups in the market which deal in renewable energy, let it be installing appliances, devices, or production of energy through renewable sources such as wind, solar, and tidal.

These companies rely on their customers and generate a lot of customer data through their business and as a business these companies rely on their customers for earning their revenue and growth. This is where companies show a need of hiring Data Analysts and Business Analysts who can derive comprehensible results from the data and facilitate better growth for these companies.

Keywords: Data Analytics, Renewable Energy, Data Visualization, Python Programming

Introduction:

The idea of using Data Analysis for business growth is not more than a decade old and businesses have actively started using their data for their betterment. Companies hire Data Analysts, Data Scientists, and Business Analysts for the specific purpose of analysing and deriving results from the data generated by the company and use it to develop strategies for growing their businesses.

Peacock Solar is one such company which deals in installation of solar powered products which are used for generating electricity using solar energy. The company generated a lot of data on daily basis. Be it customer data or through telemarketing. The company then needs to analyse this data and derive results which can then be used for developing better strategies for contacting customers and generating better sales, hence increasing business revenue.

Literature Review:

My goal as a Data Analyst is to analyse the company's data and create presentations for the company. These presentations contain the results derived from the data, and ways to improve the company's process based on these results.

The analysis process is carried out using these tools:

1. Microsoft Excel
2. Jamovi Statistical Tool
3. Jupyter Notebook
4. Python Programming and its Libraries
 - a. Pandas
 - b. NumPy
 - c. Matplotlib
 - d. Seaborn

All these tools together are used for the phases of data analysis which are: Data Cleaning, Exploratory Data Analysis, and Data Visualisation.

Methodology

Dataset:

The company provided with their datasets

1. Telemarketing and Sales Data: These datasets contained information about the company's process of conducting their telemarketing campaign. My task was to analyse this dataset and derive the current performance of the telemarketing team and suggest ways on how to improve it.
2. Customer Data: This dataset contained data for their customers who have actively installed the company's product at their homes. The dataset consisted of a huge number of rows which featured customers from multiple cities. My task was to analyse this data and figure out states for the company in which they should invest more which may result in better revenue generation.

These data set are property of the company therefore, cannot be shown here.

Conclusion:

I conclude that for this internship as a Data Analyst, the knowledge of tools and software proved to be beneficial for the tasks that were assigned to me and the results I delivered were well appreciated. It was a great time interning for this renewable energy company and I'm glad I was able to deliver results and submit my reports on time. I have become more skilled and acquired business acumen after interning for the company.