**Assignment Title:   
Harnessing Data for Social Impact and Sustainable Development Goals**

**Objective:**

The objective of this assignment is to leverage data analysis techniques to address social impact and contribute towards achieving Sustainable Development Goals (SDGs). Participants should explore a dataset related to customer behavior and product performance, analyze various aspects of sales, profitability, and customer segmentation, and identify opportunities for social impact and sustainable development.

**Scope:**

* Participants should conduct exploratory data analysis (EDA) on the provided dataset, focusing on customer and product analysis.
* The analysis will aim to understand customer behavior, identify sales trends, assess profitability, and explore opportunities for social impact within the context of Sustainable Development Goals.
* Students will investigate how businesses can align their operations and strategies to contribute towards achieving SDGs, particularly focusing on areas such as poverty reduction, gender equality, and environmental sustainability.
* The assignment will encourage students to think critically about the role of data-driven insights in addressing societal challenges and promoting sustainable development.

**Specific Tasks:**

Profiling Customers:

* Calculate the frequency of purchase for each customer.
* Analyze whether high-frequency customers contribute more revenue and profitability.
* Identify profitable customer segments and assess their contribution to revenue and profit margin.

Product Analysis:

* Determine the top sales country.
* Identify the top 5 profit-making product types on a yearly basis.
* Analyze the relationship between product price and sales volume.
* Calculate the average delivery time across different countries.

Social Impact and SDGs:

* Evaluate the distribution of customers across countries and assess opportunities for social impact in underserved regions.
* Identify product categories or segments that align with Sustainable Development Goals, such as poverty alleviation, gender equality, or environmental sustainability.
* Propose strategies for businesses to integrate social impact initiatives into their operations and contribute towards achieving SDGs.

**Requirements:**

* Access to the provided dataset for conducting exploratory data analysis.
* Proficiency in data analysis tools such as Python, R, or Microsoft Excel.
* Critical thinking skills to interpret and analyze data in the context of social impact and sustainable development.
* Ability to communicate findings effectively through written reports and visualizations.
* Creativity in proposing innovative solutions for businesses to address societal challenges and contribute towards Sustainable Development Goals.

**Submission Guidelines:**

* Submit your analysis report outlining findings, insights, and recommendations.
* Include visualizations, charts, and graphs to support your analysis.
* Clearly articulate how businesses can leverage data for social impact and contribute towards achieving Sustainable Development Goals.

**Deadline:**

19th Feb, 2024

**Grading Rubric:**

Accuracy and depth of analysis: 40%

Relevance to social impact and SDGs: 30%

Clarity of presentation and communication: 20%

Creativity and innovation in proposed solutions: 10%

**Note:**

This assignment is designed to challenge students to think critically about the potential of data-driven insights in addressing societal challenges and advancing sustainable development. Utilize the provided dataset and analytical tools to explore opportunities for social impact and propose actionable recommendations for businesses.