**Simple Linear Regression Analysis project proposal**

## **Overview**

In this project, we will use simple linear regression to explore the relationship between two continuous variables. To accomplish this, we will perform a complete simple linear regression analysis, which includes creating and fitting a model, checking model assumptions, analyzing model performance, interpreting model coefficients, and communicating results to stakeholders.

For this project, we are part of an analytics team that provides insights about marketing and sales. we have been assigned to a project that focuses on the use of influencer marketing, and we would like to explore the relationship between marketing promotional budgets and sales. The dataset provided includes information about marketing campaigns across TV, radio, and social media, as well as how much revenue in sales was generated from these campaigns. Based on this information, leaders in our company will make decisions about where to focus future marketing efforts, so it is critical to have a clear understanding of the relationship between the different types of marketing and the revenue they generate.

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| **Milestones** | **Tasks** | **PACE stages** |
| **1** | **Understand the business scenario and define the problem** | **Plan** |
| **2** | **Data exploration and data cleaning** | **Plan, Analyze** |
| **3** | **Determine which variable has the strongest linear relationship with Sales** | **Analyze, Construct** |
| **4** | **Construct the model** | **Construct** |
| **5** | **Confirm model assumptions** | **Analyze, Construct** |
| **6** | **Evaluate model results** | **Analyze** |
| **7** | **Interpret results and share actionable steps with stakeholders** | **Execute** |

***The estimated times for the milestones:***