Regression - Introduction

Marketing Questions

1. Effect of price change on revenue

2. Impact of Advertising budget on revenue

3. Importance of product placement in the store on the number of unit sold

Regression - Introduction

Aim

Our aim is to find relationship between these variables

Regression - Introduction

Tools

Tools like Linear Regression are used to model the relationship
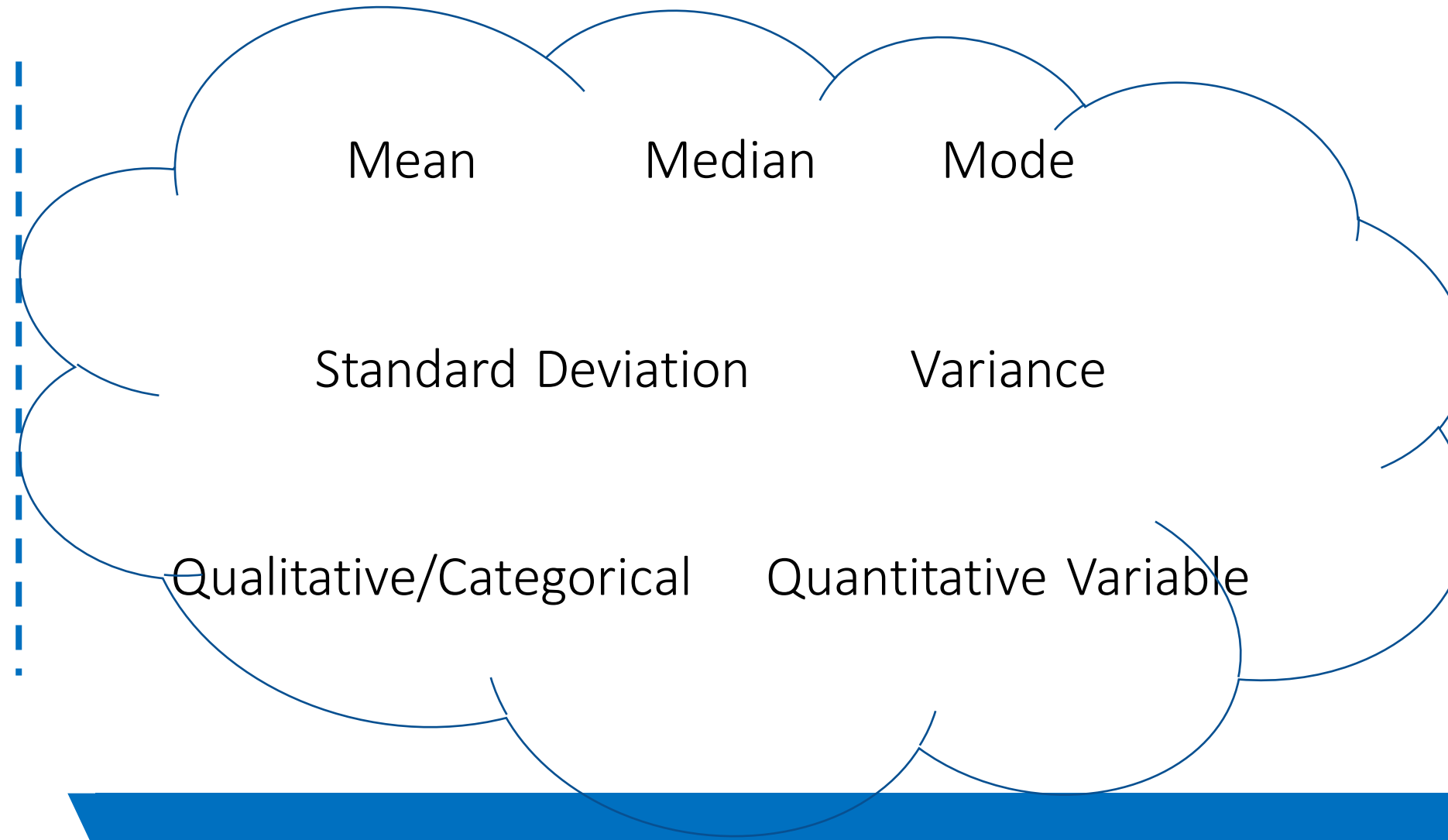
Regression - Introduction

Key Terminology

1. Dependent/ Response variable – Variable we want to predict

2. Independent/ predictor variables – Variables used for prediction

3. Linear regression – Assumes a linear relationship between dependent and independent variables.

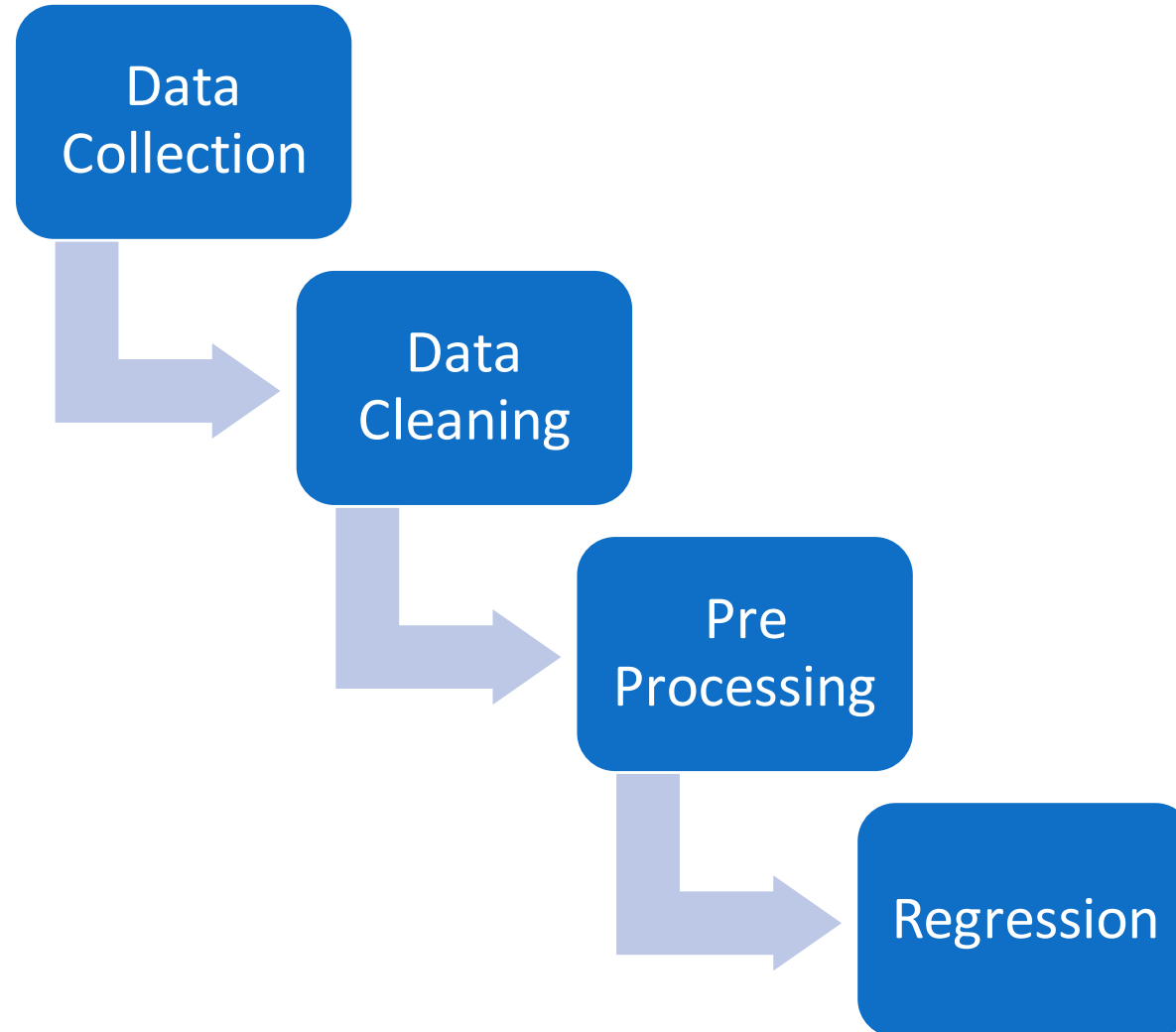4. Equation $= y = a_0 + a_1 x_1 + a_2 x_2 \ldots \ldots \ldots \ldots \ldots \ldots + a_n x_n$

Regression - Introduction

Basics of Statistics

Mean   Median   Mode

Standard Deviation   Variance

Qualitative/Categorical   Quantitative Variable

Regression - Introduction

Next Steps

Data Collection

Data Cleaning

Pre Processing

Regression

Regression - Introduction

Problem Statement

1. One dataset
2. Two Outcomes
   1. Predict the House price
   2. Impact of different variables on House price