Executive Summary Report

ABSTRACT

After all, the information a company possess has the potential to provide your small business with a competitive advantage. According to research, small firms have yet to completely capitalize on market technology. Our research reveals that 67% of single-store shops are still without a point of sale (POS) system, much less one with analytics capabilities.

Business Analysis is of everything in your firm, from your sales and inventories to your customer data. It enables you to properly track client behaviors such as sales and foot traffic in your store. This is especially crucial because your shop has a lot of moving pieces, from sales inventory to customer experience and everything in between. Retail data analysis gives the information required to make educated decisions that will increase your sales and profitability.

Looking at the scope of improvement and growth, It is also a great advantage to do some prediction analysis to define the business goals and the future plans. Here we take a dataset from a store and try to visualize the current performance. In the second part and part of future continuation of this project, Simple linear and Multiple regression Models are applied to analyze the results.

DATASET

The Dataset is of a retail store, this data set contains 17 columns and 1000 rows of sales information which was recorded for a certain period

of time. The dataset has the mix of columns. Glimpse of the dataset is the below screenshot for the reference.

> Smart_Sales.CSV

Objective:

The Objective of the project is to do a analysis on the store and apply machine learning models on this dataset for statistical Analysis.

SCOPE OF THIS PROJECT:

The task entails doing data cleaning and preprocessing procedures in R programming, analyzing, visualizing, and concluding our analysis based on our study and findings from data preparation techniques and analysis.

IMPLEMENTATION:

- Data set - Sales Store Analysis
- Data Processing & Cleaning it with help of libraries.
- Using scatterplot and histogram for the data visualization to compare the data variables
- Used Matrix correlation t to understand the relationship between various variables defined in the project.
- Models - Simple Linear Regression, Multi Linear Regression,
- Forecast – Arima & Naive