**SUPERMARKET SALES ANALYSIS**

ABSTRACT :

Supermarkets are expanding in most populated cities, and market competition is fierce. Future sales forecasting is an essential component of any business. Accurate forecasting of future sales assists businesses in developing and improving business strategies, as well as gaining proper market knowledge. Companies can use standard sales projections to analyze historical scenarios and then apply client purchases. Inferences are used prior to budgeting to detect shortfalls and weaknesses, as well as to develop a good strategy for the following year. A thorough understanding of previous opportunities enables one to plan for future market demands and increase one's chances of success. The dataset is one of the historical sales of a supermarket company that was recorded in three different branches over a three-month period. Predictive data analytics methods are easy to apply with this dataset.

In this project we used various Machine Learning Regression techniques to forecast the sales of the supermarkets referred above. The Machine Learning Techniques we used in this project are Linear Regression, K-nearest Neighbors, Support Vector Regression, Decision Tree Regression, Long Short-term Memory Regression etc. Even though we used various regression techniques, the main goal of this project is to find the ML model that predicts super market sales with the highest accuracy.

**Keywords: Regression, Machine Learning, Linear Regression, K-nearest Neighbors, Support Vector Regression, Decision Tree Regression, Long Short-term Memory Regression.**