

Abstract

Sales forecasting plays a crucial role in various business domains by predicting the future sales, increasing the business revenue , and helping the businesses to improve their strategies . It primarily focus on optimizing the budget and increase the revenue efficiency which strengthens the business planning. Various methods are involved in sales forecasting, some of them are forecasting through the historical data, forecasting through the consumer survey etc. These methods involves collecting and processing the accurate data which avoids misleading conclusions caused from unnecessary information .

The primary objective of the project is to forecast sales in a retail store, For this we are developing a predictive model that utilizes the historical data which is sales data from a store. By analyzing the data , we are visualizing the sales over a certain period and make predictions for the future sales . The goal is to improve their business strategies and increase the revenue.

In this project we used dataset from the open-source website, used Python for data analysis, and utilized Pandas for processing the sales data and handling the missing values. For visualizations we use Matplotlib library and performed various graphical visualizations for the sales over a specific period and sales distribution for a certain product. To predict sales we use linear regression model to forecast future sales based on the data.

The project provides data analysis for the sales data and helps in understanding the graphical representations of sales data. The Linear Regression model providing the predicted sales data and provide the accurate results by using the processed data . These predictions helps in understanding the sales and provides better businesses strategies and improves decision-making.

Overall the project demonstrates the importance of sales forecasting in business expansion and provides a valuable insights for the growth of the business. Implementing Linear Regression helps in providing the accurate sales for the future which enables better decisions, improve strategies and increase the revenue.

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