SYNOPSIS

Project group No: 93

Register No: Name:

121004138 Kotte Vedavamsi

121004081 Emireddy Nikhileshwar Reddy

121004191 Parnapalli Sai krishna

Project Title: Sales Forecasting using ARIMA, SARIMA and python programming

Name of the guide: Dr.Rithesh raj (AP-Research/SEEE)

Abstract:

Sales forecasting is an educated prediction of how many deals or how many much money a business will make in a certain time period. A sales forecast changes in scope, it can be measured in individual, for teams and for whole businesses. Sales forecasting is easy, above all sales forecasting is important for sales management. Sales forecasting helps to shape business decisions. With enough data, it become easy to predict the necessity and consequences of particular actions. For example, a good sales forecast can help us build our future budget, scale the size of our team. Sales forecasting helps build business objectives; business objectives help build our business

We used a dataset that was downloaded from Kaggle. It consists Perrin freres monthly champagne sales data. In the given sales data, the months as the primary key over which we've joined the monthly champagne sales. We had the data from 1964-1972. And in this mini project by using python programming and ARIMA, SARIMA we are going to predict the future sales of next two coming years. We used Pandas and NumPy to handle the dataset and perform manipulations

Specific Contribution:

- Collected the dataset that is required for this project from kaggle, understood the data property and used model accordingly
- Implemented the working models developed by team mates as a single smart contract, that can be deployed and tested out on any platform supporting smart contract deployment.
- Received information about errors due to edge cases, debugged the code and made changes to it accordingly.

Challenges faced:

- Communication issues due to different geographical locations and limited network facilities had its impact in interaction and sharing of ideology
- Worked a lot in debugging phase since the errors caused were rarely spotted on
- In the middle of the project, we changed our model (which is only available in particular software) due to few issues in software license

Specific learnings:

Python libraries, ARIMA and SARIMA model

Signature of the student

Signature of guide

Date: 28-12-2020